

Manchester Town Plan, 2017

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Town of Manchester, Vermont, Chartered in 1761

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Table of Contents

Part 1: Vision, Policies & Actions
Section 1: Economic Development & Housing
Section 1.1: Economic Development
Section 1.2: Housing
Section 2: Energy, Natural Resources & Flood Resilience
Section 2.1: Energy
Section 2.2: Natural Resources
Section 2.3: Flood Resilience
Section 3: Services: Transportation, Utilities, Public Health & Safety, Education
Section 3.1: Transportation Infrastructure
Section 3.2: Municipal Utilities3
Section 3.3: Power & Telecommunications Facilities
Section 3.4: Public Services38
Section 3.5: Education4
Section 4: Recreation, Arts & Culture
Section 4.1: Recreation
Section 4.2: Arts & Culture
Part 2: Land Use Plan47
Section 5: Mixed Use Core & Historic Districts
Section 5.1: The Core
Section 5.2: Historic Districts
Section 6: Neighborhood Residential & Developed Recreation
Section 7: Working Lands & Rural Residential
Section 8: Forest, Conservation & Recreation
Part 3: Plan Development, Implementation & Context63
Part 4: History and Population Characteristics6
Appendix A. Inventory of Significant Natural Features in Manchesteriv
Appendix B. Inventory of Arts & Cultural Resources in Manchestervi

Part 1: Vision, Policies & Actions

Manchester is a quintessential New England Community with a historic core surrounded by rural pastures and forested mountain backdrops. Situated in the Batten Kill Valley between the Green and Taconic Mountains, Manchester cherishes its natural beauty as the basis of a high quality of life for residents and the foundation of a strong visitor economy. The local education system with public and private options encourages innovation and personalized learning. The town encourages business growth and development and offers world class dining, hospitality and shopping options. Municipal parks and services are award winning and renowned. This town plan will serve as a guide for strengthening and protecting these qualities over the course of the next eight years, with adopted policies and actions in the categories of economic development, housing, energy, natural resources, transportation, education, municipal services, recreation, and arts and cultural resources.

Manchester has seen significant change in the last few years with the conclusion of the roundabout project and commencement of some large scale redevelopment within the commercial core. In addition, the town secured \$580,000 in state funding for bicycle and pedestrian enhancements to Depot Street. On top of that a municipal planning grant is helping the town move forward with the first comprehensive overhaul of the zoning ordinance since 1983. With these positive developments, the town also recently suffered the demise of the Manchester and the Mountains Chamber of Commerce. However, as the community comes together to decide how to fill the void left by the exit of the chamber, there are opportunities for improving upon the functions that the chamber did provide to the community.

Section 1: Economic Development & Housing

Section 1.1: Economic Development

Economic Development Mission: Create a vibrant economic environment that encourages people to both live and work in Manchester.

In 2016 the town completed in conjunction with the Village of Manchester and the Town of Dorset, the *Northshire Economic Development Strategy* (NEDS). That strategy for the three municipalities can largely be viewed as an economic development strategy for the Town of Manchester. In that vein, the mission statement for NEDS is appropriate for the town and, tailored to Manchester, is hereby adopted as the economic development mission for the town.

NEDS identified four goals in line with this vision: (1) Improve the economic development environment, (2) Cultivate tourism, food, arts and culture industries, (3) Support entrepreneurship and business development, and (4) Enhance the quality of life for residents and workers. Each of these goals is supported by identified strategies and specific actions, and many of those are reiterated here in this town plan.

The NEDS study confirmed that diversity of Manchester's economy remains an issue. While a number of manufacturing or office uses remain in town, the local economy generally depends upon tourism. Many retail and service businesses exist in support of tourism and second home development, but there are fewer retail businesses that exist to serve the residential population of the town. Consequently, NEDS found there is retail "leakage" that could be captured with new retail development in the areas of general merchandise, food, and sporting goods aimed to serve

Manchester, Vermont | Town Plan 2017

the resident population. NEDS identified three industries that have strong performance histories in Manchester and the broader Northshire area: financial investment activity, furniture related manufacturing, and the tourism sector. These sectors, therefore, are suitable for promotion and expansion. In addition to these, the NEDS steering committee identified expansion of food related enterprises as desirable, including support for a brewpub.

Policy: Expand Manchester's food industry.

- Participate in the development of a Manchester Culinary Trail
- Encourage and support value added food production in Manchester.

NEDS also reaffirmed the long identified problem of Manchester's housing stock being unable to meet the needs of its working population, with a particular lack of workforce level housing. Housing affordability must be a key component of any economic development strategy. If affordable housing stock is not available, then the pool of potential employees will be a limiting factor no matter how successful any other economic development strategies may be. Housing issues are discussed in detail in the next section along with housing policies and goals.

Economic development means more than just attracting new industry, or creating new jobs. It also means protecting a high quality of life, providing high-quality educational opportunities, and providing high-quality infrastructure. Protecting Manchester's quality of life has been, and will continue to be, a paramount factor in the town's long range vitality and success. No matter what strategies are pursued for economic development, the town must guard carefully its attractiveness as a place to live and visit. Accordingly, Manchester's natural beauty and uniqueness are two of its greatest assets. Its long-term success as a livable community depends in large part upon how well we maintain and enhance those assets. The goals and policies in this plan are intended to help maintain Manchester's high quality of life for its residents, and its uniqueness and attractiveness to visitors. Goals and policies specific to natural resources are discussed in Section 2.2.

Furthermore, the town has long recognized the importance of social vitality and interaction – not just the creation or use of physical infrastructure – to having a resilient and sustainable economy. Key to this involves focus on that which will interest a younger generation of community members to settle here, to live, work, start businesses, raise families, and participate in the governance of the town. The town will continue to promote its tourism economy, with a historic downtown and lively mix of commercial, cultural, and environmental and recreational attractions. Specific measures to enhance arts and cultural assets are discussed in Section 4.2.

Action: Work with community members to develop a downtown nightlife program.

Manchester's municipal services and facilities are another asset, including The Dana Thompson Memorial Park. With the recent completion of two new athletic fields and new hotel construction in town, Manchester is poised to serve as a venue for athletic tournaments. This was identified as an economic opportunity in the NEDS report and the town will move forward with a plan to market itself as such to school and club soccer, lacrosse, and other field game organizations. In addition, there are significant efforts to establish a Riverwalk in the downtown and a recreation path along the old OMYA railroad bed that would connect the downtown to North Road. Manchester's recreation assets and plans are discussed further in Section 4.1.

Policy: Leverage and promote existing sports and outdoor recreation assets to increase visitation to Manchester.

- Promote Manchester as an athletic tournament venue.
- Support continued improvement and extension of pedestrian and bicycle infrastructure.
- Support the efforts of Bike Manchester to make Manchester a biking destination.
- Support the efforts of Manchester Riverwalk and its mission to build, beautify and maintain public pathways along the Batten Kill.

The town will proactively define its economic future, by being aware of economic trends, and being prepared to take advantage of economic circumstances. In conjunction with organizations such as the Bennington County Regional Commission and its new relationship with what has been known as the Bennington County Industrial Corporation, the town should identify appropriate opportunities that will allow desirable light industrial businesses to grow and flourish in Manchester. While seeking new enterprises, the town must also pay attention to and nourish existing businesses, many of which have been quiet mainstays of our economy, supporters of our schools and local nonprofits, and otherwise contributors to the fabric of our community.

Given this, light industrial development is an important component of Manchester's economy. Indeed, it could be, and many argue should be, a more prominent part of the town's economic base, so that we are less dependent upon the retail and service sectors. Small businesses and microenterprises strengthen and diversify local economies often while creating minimal environmental impacts. A variety of changes were made in past years to industrial district and transient commercial overlay provisions of the land use and development ordinance (*i.e.*, zoning ordinance or bylaws) to allow greater flexibility in the types of businesses that may locate in Manchester. The zoning regulations are undergoing comprehensive revision in 2016 and the goals outlined in this section have guided that effort and will guide future efforts to ensure the ordinance is effectively implementing the goals of this plan.

Policy: Ensure needed land area and infrastructure are available in appropriate areas for various industries.

- Allow microenterprises within agriculturally zoned areas.
- Allow light industrial development in areas zoned commercial and mixed use, in addition to industrially zoned areas.
- Expand light industrial zoning in Manchester.
- Expand the sewer service area to adjacent areas that can support new residential and light industrial development.

The town will assess the needs of existing and potential industry, and take steps to create a favorable climate for light industrial development that is appropriate for, beneficial to, and accepted by the community. Industry should be located in appropriate areas which contribute to an orderly growth pattern, are served efficiently by municipal services, and are compatible and consistent with the rural character of the area. Utilities, roads, and other essential services should be available and adequate to serve a project's needs. Industry and related activities should afford maximum protection to adjacent properties, and any nearby residential areas (existing or proposed). Traffic routes and access points should be compatible with nearby residential areas. Industry should provide adequate greenspace and landscaping to maintain the open space character of the area, and to effectively screen industrial activity from adjacent nonindustrial uses.

Appropriate infrastructure must be in place to serve the needs of the community and employers. More than just water, sewer, and power, this includes fiber optics, access to high-speed, wide-bandwidth telecommunications facilities, and other types of technological capacity. Broadband access throughout Manchester is as essential as electricity in allowing citizens, employers, and home businesses to thrive and participate in community and commerce. Section 3 of the plan addresses the provision of public services.

Policy: Encourage the creation of employment that provides professional challenge and adequate pay with which to support a family.

Growth in jobs providing professional challenge and adequate pay with which to support a family is needed in Manchester. Accordingly, workforce development, through local schools and continuing education programs, is another key component of successful economic development – whether in maintaining existing services and businesses, supporting business growth, or in attracting new employers and employees. Education goals are enumerated in Section 3.4 of the plan.

Figure 1.1. Village Center Boundaries. Map showing the village center designation encompassing the historic Factory Point commercial center along Main, Bonnet and Depot Streets, mixed use historic structures on Main and Bonnet Streets, Manchester Elementary and Middle School, and Adams Park and the Town Green.



In 2013 the town received a village center designation from the Vermont Downtown Board. The Department of Housing and Community Development program and designation allows

landowners within the village center access to tax incentives for redevelopment, and gives the town an advantage when applying for state planning grants. Particularly after the loss of the local chamber of commerce, the town is considering pursuing the more extensive Downtown Designation that would allow greater access to resources supporting downtown revitalization and commercial activities in the core. The program would require the creation of a downtown organization, either a nonprofit corporation or a municipal commission that would assume responsibility for implementing the approved revitalization program. Indeed, in the last year town officials and business leaders have met with Downtown Designation Program staff to discuss how to proceed toward a designation. Pursuit of the expanded designation would require partnering with private businesses and community members, and the town will continue to explore designation with these partners.

Action: The town will continue to explore application for expanded Downtown Designation by the Vermont Downtown Board.

Section 1.2: Housing

Housing Mission: Support the development of housing types to meet the needs of a diversity of people, including those working and raising families in Manchester.

Land and housing in Manchester remains desirable, and therefore more expensive, than in many other Vermont communities. The reasons for this are often attributed to a number of factors, including: the town's natural beauty, cultural amenities, commercial activity, high quality schools, and proximity to ski areas. While the town values the high quality of the natural and built environments, this creates continuing problems related to affordability. Pressure has long been exerted on the housing market by Manchester's attractiveness in the retirement and second home markets, and more recently, by families migrating from more urban areas so that their children can attend local schools. Indeed, many natives wonder whether their children will be able to stay (or return to) and raise families in their hometown.

Manchester has long recognized this housing affordability problem, and has taken steps to help improve the situation. Funded by a state grant, the 1989 *Housing Action Plan* estimated that Manchester needed 62 units of elderly housing, 96 units of family housing, and 32 units of small rental housing. Since that time, the Regional Affordable Housing Corporation, now Shires Housing, Inc., has built two rental housing neighborhoods that addressed that need. Another important outcome of the 1989 study were Planned Affordable Residential Development (PARD) overlay zoning districts that allowed for greater development densities than would otherwise be permitted, and exempted affordable housing projects from the town's Major Development Project Review. The PARD bylaw was replaced in 2016 with a section of the *Manchester Land Use & Development Ordinance* entitled "Affordable Housing Regulations" that retained provisions of the PARD districts essentially without modification.

Policy: Cooperate with private sector and non-profit organizations to help ensure the availability of an adequate stock of housing of varying affordability, located in appropriate areas.

As it has in the past, the town will continue to work cooperatively with private sector, non-profit organizations (Shires Housing, Habitat for Humanity, Vermont Housing & Conservation Board, Vermont Housing Finance Agency, Housing Vermont, Bennington County Regional Commission), and other entities wishing to promote or construct affordable housing in

Manchester, Vermont | Town Plan 2017

Manchester. While housing studies and projects largely focus on "affordable" housing subsidized by public and private money, there is also a clear need for reasonably priced housing, or "workforce" housing as it is being referred to by policy makers and as identified in the NEDS report. Workforce housing may not be subsidized, but is intended to be affordable for working persons and families, and younger people who may wish to stay in the town where they were raised, but who do not meet the low income requirements for subsidized housing. The NEDS report indicated that there is and will be growing and significant demand for workforce housing in Manchester in the coming years, with immediate demand for over 100 units.

In 2006 the town conducted a residential buildout analysis finding that the zoning regulations would allow an estimated 5,473 new residential units, with 85% of those falling in the extensive Farming & Rural Residential (FRR) zoning district, which allows one unit per two acres of developable land area. The other 15% were divided between the Single Residential (SR) and General Residential (GR) zoning districts. The buildout analysis assumed no increase in the commercial zoning districts and no expansion of the sewer service area. Because this full buildout would not be realized even if the town issued permits for 50 new units per year for the next 100 years, the analysis also estimated a 25 year buildout scenario. The 25 year analysis indicated that 775 new residential units might be constructed within these areas by about 2030.

However, this 25 year analysis was conducted before the housing market crash and recession of 2007-2010 and included a continued moderate increase in housing units each year (between 27 and 35 units per year). Indeed, this rate of growth has not continued, the town having issued permits for only 5 new single family houses and 6 downtown conversions to apartments in 2016, 10 housing units in 2015, and 11 in 2014. What is clear from the buildout analysis and given the 2006 zoning ordinance, a preponderance of allowable residential growth would occur in the FRR, whereas the town wishes to direct new residential growth more to the SR, GR and commercial zoning districts within the core. The NEDS study also indicated that much of the demand for new housing may come from Generation Y and Millennials who want to live and work where there is increased walkability and more non-car oriented options. Retiring and downsizing Baby Boomers are also seeking such settings. Aiming to address these trends and other concerns, the town is currently conducting a comprehensive overhaul of the zoning ordinance, which if adopted in 2017 would increase allowable residential density in the core while decreasing allowable density in the rural outlying areas.

Exacerbating the problem of developing affordable and workforce housing in Manchester are the cost of building materials, the high cost of labor, and other market forces. In addition, Vermont has energy standards that although may save on long term costs, increase construction costs in the state relative to other states, particularly those with warmer climates. Demand remains for higher end homes in Manchester, and these are more profitable to build than more modest structures. Indeed, recent data reported by our assessor show that the median price of homes sold in Manchester (between April 1, 2015, and March 31, 2016) was \$344,000 (all homes, primary and secondary). This median price of a home in Manchester is roughly a 24% drop from the prerecession high of \$450,000 (Assessing Year 2008), yet affordability remains an issue. The NEDS study showed that the median annual value of primary residences sold remains about \$100,000 below that of secondary residences sold in Manchester and the Northshire in general. The town can help address the high costs of construction by increasing residential density, simplifying and streamlining the permit process, and by the maintenance and expansion of municipal infrastructure and services.

With changes to the zoning ordinance, the town will pursue the following housing policies and actions:

Encourage mixed use development that includes housing as an integral element.

- Waive density requirements for housing in the commercial core when part of a mixed use project, or redevelopment of existing building stock.
- Provide reduced sewer allocation fees for new development that includes housing in the commercial core.

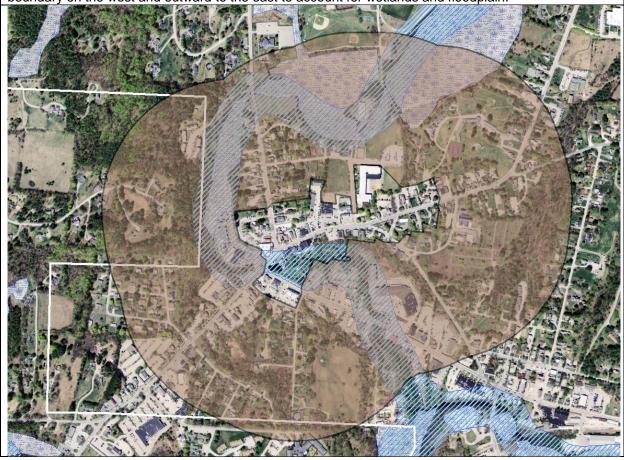
Encourage moderately priced ("workforce") infill housing within the sewer service area.

- Allow density bonuses for workforce infill housing in the core.
- Provide reduced sewer allocation fees for new workforce infill housing development.

Require retainment of existing housing stock within the commercial core.

 Housing units displaced by conversion to commercial use or other mixed use development should be retained or replaced.

Figure 1.2. Neighborhood Development Area (NDA) Designation. NDA designation would afford neighborhood development incentives to a quarter mile area around the village center. The NDA boundaries can be modified to account for municipal boundaries and undevelopable lands such as wetlands and floodplain shown below. The boundary between the Town of Manchester and Manchester Village is shown in white below. The NDA boundary could be molded to the municipal boundary on the west and outward to the east to account for wetlands and floodplain.



With a village center designation from the Vermont Downtown Board, the town has the option to pursue a Neighborhood Development Area (NDA) designation. This designation allows developers of residential projects exemption from Act 250 permitting and other incentives to

Manchester, Vermont | Town Plan 2017

develop walkable residential neighborhoods in close proximity to the village center. Should the town seek and gain a downtown designation, the designated NDA would be more extensive. Once the comprehensive rewrite and rezoning project is complete in 2017, the planning commission will apply for the NDA designation for areas around the village center that are suitable for neighborhood residential development.

Action: Secure Neighborhood Area Development Designation from the Vermont Downtown Board.

Section 2: Energy, Natural Resources & Flood Resilience

Section 2.1: Energy

Energy Mission: Encourage and support the conservation of energy and the development of renewable energy resources in Manchester.

Energy - its availability, cost and environmental impacts - is of critical importance to all aspects of individual and community life. Some key energy resources, such as oil and gas, are subject to fluctuating supply and cost and contribute to increased carbon dioxide in the atmosphere, and pollution of air, water and land resources. Conservation, whether through increased efficiency or decreased demand, will be the most important component of minimizing the costs of energy usage. Every dollar not spent on energy is available for local investment or saving, and to meet other basic needs. Optimizing energy use does not just lower operating costs, it also lessens adverse environmental impacts and thereby the costs associated with environmental damage and impaired public health.

Action: Amend the land use and development ordinance to more effectively encourage compact, denser development and use of the core while protecting the rural character of outlying areas.

Effective land use planning promotes energy efficient design. Higher density development in the core with mixed uses including housing, lessens the need for car travel and allows for more efficient provision of services compared to scattered development. An efficient network of sidewalks and trails, along with effective parking strategies, make it easier and more comfortable to walk or bike instead of driving. The town is actively pursuing zoning changes that aim to encourage denser use in the core while protecting the rural character of the surrounding countryside. This effort is in line with minimizing energy consumption.

The siting, design, and construction of buildings effects the amount of energy needed for heating and cooling, as well as the amount of electricity needed for lighting. Proper subdivision design, building orientation, construction, and landscaping provide opportunities for energy conservation measures such as less vehicular travel, passive solar heating and cooling, and natural lighting. These strategies are discussed further in part 2 of this plan. Additional energy savings can be realized by retrofitting existing buildings with insulation, more efficient doors and windows, weather stripping, compact fluorescent or LED (light emitting diode) lights, more efficient appliances, and more efficient use of those appliances.

The town itself will set a positive example by considering energy issues in all decisions concerning capital expenditures on municipal infrastructure, as well as operating and maintenance costs for buildings, facilities, and vehicles. An *ad hoc* Manchester energy committee active in 2008 and 2009 spearheaded energy conservation projects, including replacement of streetlights and energy audits of town buildings and facilities. Accomplishment of recommended actions from the energy audits led to energy conservation measures at the town hall and public safety facility, as well as a new more energy efficient pool house at the Dana Thompson Memorial Park. The town will continue to pursue energy conservation, use of cleaner fuels, and other strategies to optimize energy efficiency in all municipal buildings, vehicles, and programs.

The town strongly supports broadened awareness of and application of best practices in all aspects of energy production, consumption, and conservation. These include, but are not limited

to meeting or exceeding State of Vermont energy efficiency standards for residential and commercial construction, and application of LEED (Leadership in Energy & Environmental Design) or similar standards in all aspects of site design and construction. Municipal practices referenced throughout this plan will also reinforce this policy, including continuing to build sidewalks, paths, and other amenities to encourage walking and cycling, and strengthening opportunities for downtown housing. The town encourages other best practices to reduce energy use and pollution, and otherwise lessen adverse impacts (*e.g.*, avoiding excessive lighting or unnecessary idling of motor vehicles, reuse and recycling of materials). Continued partnership with Efficiency Vermont on educational and efficiency programs may yield further benefit in reducing demand, thus also extending the life of existing supplies and infrastructure.

Dark Skies

Manchester recognizes the importance of dark skies in reducing energy use, protecting public health and the life cycles of our resident flora and fauna, and providing for recreational astronomy and wilderness opportunities.

Controlling artificial light in Manchester protects the natural wax and wane of the light cycle and permits the beauty of the night sky to shine, thus enabling both residents and visitors of our town to marvel at the wonders of the universe. Light pollution, defined as any adverse effect of artificial light, is a growing problem throughout the world, including in Manchester. Sky glow, glare, light trespass, light clutter, decreased visibility at night, and energy waste, are some of the negative consequences of excessive and poorly designed lighting, particularly outdoor lighting. Light pollution disrupts the earth's natural rhythm of day and night. Humans, and most other organisms on earth, evolved within the context of the light-dark cycle of day and night. Research is making it clear that artificial light, particularly blue light at night, contributes to many human health problems including depression and obesity. Manchester's dark skies constitute a precious resource. To protect Manchester's dark skies, enhance public safety and limit energy waste, the *Manchester Land Use & Development Ordinance* limits the brightness of exterior lighting and requires it to be shielded. The planning commission will propose strengthened ordinance provisions with regard to outdoor commercial lighting to require lights to be extinguished by a certain time past closing with the exception of security lights triggered only by motion sensors.

Renewable Energy Resources

Action: The town recognizes the benefits of renewable energy use and will establish a renewable energy resource plan to guide the development of renewable energy resources in Manchester.

The state has established a goal of attaining 90% of its energy use from renewable energy resources by 2050. In order to realize that goal, Act 174, passed by the legislature in 2016, aims to improve regional and local renewable energy resource planning with the implementation of a program to certify regional and municipal renewable energy resource plans. A renewable energy resource plan should include town scale geographic analysis showing suitability for access to renewable resources. Constraints such as protected wetlands, river corridors or rare natural communities should be extracted from areas of suitability. Other constraints may not preclude renewable energy resource development, but warrant consideration, including the presence of prime agricultural soils and identified cultural and scenic resources. Manchester must identify critical resources to be protected from development but must allow reasonable area for renewable energy development. Accordingly, by May 2018, the town will develop a renewable

energy resource plan under the guidance of the Bennington County Regional Commission (BCRC).

In the meantime, planning at the regional level by the BCRC has identified current solar generation of 1,017.3 kilowatts (kW) in Manchester and new generation by 2050 of 10.4 megawatts (MW) as appropriate for the town. The town has expressed support for a proposed 1.3075 MW project on the 4-acre roof of the Natural Form mattress factory that would be the largest rooftop installation in Vermont. Furthermore, the town is pursuing installation of a 150 kW solar array at the municipal wellheads. The electricity generated would be purchased by the town at a 10% discount and would power the wellhead pumps. Various other solar projects have been realized in Manchester in recent years, including a 142.5 kW array at the Riley Rink, the 137.8 kW rooftop installation at the downtown car dealership, and a 55.9 kW solar tracking installation at Henry's Bistro, and a 150 kW rooftop array at the Vermont Country Store. These four projects account for a significant portion of the 1,017.3 kW currently being generated in town.¹ BCRC has indicated that wind and hydroelectric power generation would be limited in Manchester, although wood biomass production could be regionally significant.

Renewable energy resources use offers potential advantages over continued use of fossil fuel based resources. Potential benefits include lower or no global warming or pollutive emissions, improved environmental quality and public health, stable energy prices and a resilient energy system, jobs and a strengthened local economy, as well as an inexhaustible supply. Consequently, solar, wind, hydroelectric, geothermal, biomass and wood gasification energy production and use should become more prominent in the town's energy mix. The town will support efforts to research and develop these and other alternative, ecologically sound energy sources. The town itself will consider options for enhancing its own renewable energy production or supplies. Key to supporting the development of renewable energy resources in Manchester will be to adopt a renewable energy plan according to newly established rules developed by the Vermont Department of Public Service. Certification by the state will require that the plan receive substantial deference in Vermont Public Service Board proceedings, ensuring that Manchester's socioeconomic wellbeing is protected from incompatible energy development.

Section 2.2: Natural Resources

Natural Resources Mission: Protect Manchester's natural resources, particularly its scenic ridgelines and the Batten Kill.

Manchester's long-term success as a livable community depends upon how well we maintain and enhance our unique natural resource assets. Natural resources have inherent value above and beyond their perceived value from a human perspective. Natural resources are the foundation for life and the natural processes that form essential interconnections between all living species and earth systems. What happens to one resource invariably affects others, including human systems. Manchester's economic success over the past 200 years (and undoubtedly over the next 200 years) is inextricably linked with its natural resources and natural beauty. Thus, even from a purely human perspective, the town must take the long view, and protect and conserve its natural resources.

Understanding the natural environment is a key consideration when planning for appropriate land use. Physical conditions (including but not limited to soils, slopes, elevation, critical

¹ Community Energy Dashboard Energy Atlas, January 27, 2017. http://www.vtenergydashboard.org/energy-atlas

Manchester, Vermont | Town Plan 2017

habitats, wetlands, drainage channels, and flood hazard areas) may limit the type of development that is appropriate for a particular area. The need to preserve forests, wetlands, riparian areas and other critical natural resources must also influence land use planning. Indeed, general land use plans as well as specific site development plans must consider natural resource opportunities and constraints first, and then design appropriate site development plans with these in mind. Land use policies are described in Part 2 of this plan.

A variety of unique natural features have been identified as important to the ecological and socioeconomic wellbeing of Manchester. These are identified and described in Appendix A. These unique natural features and other critical parcels of land, including but not limited to those described in Appendix A, should be conserved or preserved as they are or in a natural condition. The town may wish to further refine and prioritize this list so that conservation efforts are effective and efficient in achieving municipal goals. Conservation or preservation can be achieved by fee-simple acquisition, donation or acquisition of development rights or conservation easements, involvement of land trusts or other charitable organizations, and other cooperative strategies or partnerships which accomplish the desired goals. Indeed, several of the natural features listed in the appendix are already protected by a variety of means by various partnerships, agencies or organizations.

Ridgeline Resources

The Town of Manchester recognizes the essential economic, ecologic and spiritual value of the Green Mountain and Taconic Ridgelines.

Manchester is situated in the Batten Kill Valley with the Green Mountains on the east and the Taconic Range on the west. Equinox Mountain on the west is singularly iconic of the Manchester experience and has been the subject of relatively recent passionate protection from wind energy development of its southern flank, Little Equinox Mountain. Hundreds of acres of the eastern slopes of Mt. Equinox have been protected through the efforts of the Equinox Preservation Trust. However, the ridgeline is largely owned by the Carthusian Foundation of America, which operates a monastery on the western flank of the mountain. As such it is not permanently protected from development and in 2005 Equinox Wind Partners, LLC, which held a 25 year lease from the Carthusians, proposed the reinstatement of wind turbines on Little Equinox Mountain, falling to the south and west of the main peak. The Town of Manchester and Manchester Village engaged the Orton Family Foundation to provide an impact analysis of the proposal for the public. A vote at town meeting in 2006 authorized significant funds - and Manchester Village was similarly committed - to fighting the project, and in the end it was abandoned by the developer.

Ridges and mountaintops provide much of Manchester's natural beauty; protection is an important local and regional goal. Manchester's surficial geology is among the most diverse in the state, and the mountain tops and ridges of the Taconic and Green Mountain Ranges form a striking backdrop for the town. Many glacially formed hills and ridges are found at lower elevations in Manchester. This topographic diversity provides an important natural, visual contrast to the built environment. These hills, ridges, and mountains contribute to the natural beauty of Manchester and warrant protection. With regard to lower slopes and hillsides, the intent is not to prohibit all development; rather, that development and structures be sited sensitively and appropriately, in ways that fit into the landscape.

Land areas at higher elevations are fragile and susceptible to damage, since environmental conditions are more severe (more precipitation, higher wind speeds, lower air and soil

temperatures, and shallower and more poorly-drained soils). Since fewer plant and animal species can survive such conditions, there is less ecological diversity in these higher-altitude communities. Therefore, these areas are generally more vulnerable and need greater protection from development.

Action: A component of developing a renewable energy resource plan will be to conduct viewshed analyses to identify and quantify the relative importance of ridgeline resources in Manchester.

Surface Water Resources

The Town of Manchester recognizes the importance of healthy riparian zones and surface waters in protecting both the natural and socioeconomic wellbeing of our community.

When in good condition, aquatic ecosystems such as streams, rivers, ponds, lakes, and wetlands can provide numerous benefits to human communities, including recreational opportunities like fishing and swimming, flood control, and a predictable and sustained water supply for irrigation and other uses. Collectively, these ecosystem services provide considerable economic benefit. For example, a healthy river filled with clean cold water and trout means revenue for hotels, restaurants, fishing guides, and regional retailers. Similarly, having healthy aquatic systems also means spending less money building flood control infrastructure or on after-flood recovery.

One of the most important issues in protecting and maintaining aquatic systems is good stewardship of riparian zones. Riparian zones are bands of vegetation serving as interface between uplands and aquatic systems. Riparian zones should be thought of as both unique ecosystems in their own right and as integral parts of the aquatic system, as the health of the riparian zone is a direct reflection and control on the health of the aquatic system. Riparian zones provide many important services to aquatic systems, including providing shade, which regulates water temperature (a critical concern for healthy fish populations), trapping nutrients and sediments that would otherwise enter and pollute the aquatic system, stabilizing riverbanks and preventing bank erosion, and providing "riverwood" into the aquatic system which is an important habitat element. Riparian zones also provide important habitat for many species of birds, mammals, amphibians and reptiles. When viewed at a landscape scale, riparian zones often function as movement corridors for both resident and migratory species, as riparian zones are, or could be, near continuous bands of high quality habitat latticed across an otherwise developed landscape.

As a general guide, a healthy riparian zone can be thought of as one where native species predominate and where multiple vegetation strata are present, including ground cover such as native grasses, ferns or duff layer, a community of intermediate height shrubs and both young and old trees. Old (*i.e.*, large) trees are particularly important in riparian zones, as they provide the greatest benefits to the system in terms of bank stabilization, shade, nutrient inputs and filtering, and current and future habitat. The protection of these large trees in riparian areas must be a notable priority in land use decisions.

The most pervasive threat to riparian zones, and one well under human control, is the removal of existing trees and shrubs, whether it is for timber harvest, expansion of agricultural fields, or simply to provide a view. Manchester seeks to limit, or fully eliminate, encroachment of these kinds of activities into riparian zones. Other common threats to riparian zones include exotic species, which can smother native plants and typically offer little or no habitat or food value to

Manchester, Vermont | Town Plan 2017

native animals, and alterations to the hydrology of the aquatic system (*i.e.*, water diversions or other consumptive uses) that can promote drying out of riparian zones and their eventual progression to upland like conditions.

Perhaps the most widely applied approach for protecting riparian zones is the idea of buffers, meaning a width of land around the perimeter of the aquatic system and encompassing all or some part of the riparian zone within which certain land use activities are regulated. While there is no hard and fast rule on how wide a buffer strip should be to protect a water body, a general rule is that for smaller streams (*e.g.*, headwater streams), the stream edge buffer should be 10 to 20 feet on each side of the stream. For larger streams, rivers and still waters, buffer widths of anything from 20 to 100 feet have been used with the basic approach that the more pristine or otherwise ecologically important an area is, the wider and more restrictive of uses the buffer should be.

Wetlands provide a transition between terrestrial and aquatic systems where the water table is usually at or near the surface, or the land is covered by shallow water. A wetland has one or more of the following three attributes: (1) at least periodically, the area supports predominantly hydrophytic (water loving) vegetation; (2) the substrate is predominantly undrained hydric (wet) soil; or (3) the substrate is nonsoil, and is saturated with water or covered by shallow water at some time during the growing season of each year. Benefits provided by freshwater wetlands include: flood and stormwater control, critical fish and wildlife habitat, protection of subsurface water resources, provision of recreational opportunities, pollution abatement, erosion control, educational and scientific research opportunities, open space and aesthetic appreciation, and provision of nutrients for freshwater food cycles. As such, wetlands should be protected from development. Before changes are made to streams, rivers, wetlands, or riparian land, consultation with appropriate state agencies is required. Streams and rivers are not just passageways for water; they are a fundamental part of our ecosystem, and a watershed approach to land use management is important in protecting these resources. In addition to riparian buffers, setbacks from lake and pond surface waters should also be required.

Batten Kill: The Town of Manchester recognizes the essential economic, ecologic and cultural values of the Batten Kill and its major tributaries.

The Batten Kill and its tributaries are an important natural, recreational, and economic resource which should have the greatest protection possible. Designation of the Batten Kill by the State of Vermont as only one of four Outstanding Resource Waters within the state reinforces these local values. Any expenditure of funds by the town for conservation purposes should give the highest priority to the acquisition of land or easements for property identified for protection along the Batten Kill. Special measures will be taken to conserve and enhance the natural, scenic, recreational, historic and cultural elements of the river and landscape.

Forest Resources

The Town of Manchester recognizes the importance of healthy forest ecosystems in protecting both the natural and socioeconomic wellbeing of our community.

Forest and timber lands cover much of Manchester. These forests stabilize soils and slopes, prevent flooding, provide valuable timber, wildlife habitat, and recreational resources, filter air pollutants, and have important recreational, economic, and aesthetic value. Indeed, our forested ridgelines are key to our economic wellbeing. Consequently, land use and development of forested lands in Manchester should maintain natural vegetative cover to the greatest extent

possible. Steep slopes and higher altitudes are more sensitive, and require higher levels of protection and review. Logging, timber, and forestry activities must, at a minimum, follow the State's recommended Accepted Management Practices for maintaining water quality. In addition, loggers should employ strategies that ensure a long-term sustainable yield of timber, maintain and enhance the ecological integrity of forest ecosystems, and minimize or prevent adverse impacts upon the land.

The Manchester Land Use & Development Ordinance establishes the Forest & Recreation zoning district, encompassing more than 50% of the land area of the town and including all lands above 1,600 feet in elevation on the Taconic ridgeline and all lands above 1,200 feet on the Green Mountain ridgeline. Uses in this district are limited to those requiring a forested landscape. Development of buildings serving these uses is allowed only at very low density. Other wooded lands are extensive in other rural parts of town, but the ordinance does not explicitly require maintaining them as forest except in the case of some required surface water setbacks. In fact, many of these lands fall in the Farming & Rural Residential zoning district, which has allowed a 2 acre minimum lot size since 1983. The town is currently pursuing zoning district changes that would increase the minimum lot size for these rural areas. This should help protect existing wooded lands, but targeted permanent conservation lands may be important to protect such lands that provide irreplaceable functions if lost to pasture or development.

Action: The Conservation Commission will work to identify wooded lands providing irreplaceable ecological functions and seek funding for conservation easements or other appropriate protection tools.

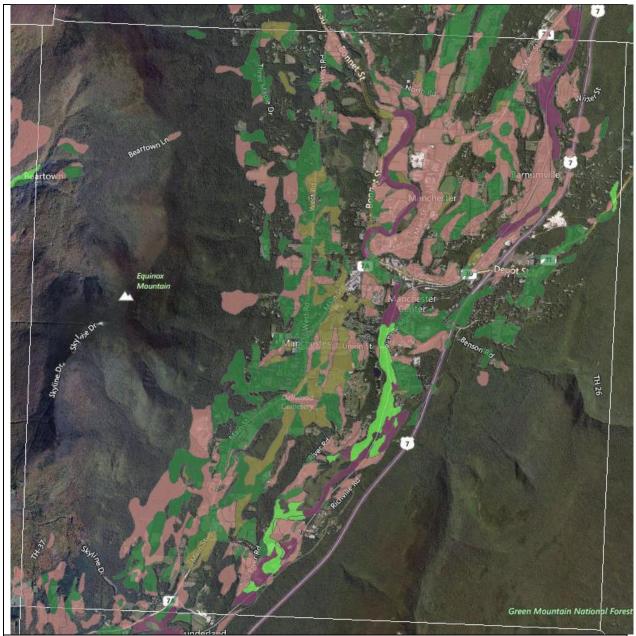
Agricultural Resources

The Town of Manchester recognizes the importance of successful agricultural enterprise to the socioeconomic wellbeing of our community.

Agriculture, while not a dominant land use in Manchester today, remains essential to Manchester's working landscape cherished by residents and visitors alike. It is important to conserve agricultural lands for this reason and to provide for potential future needs. Therefore, the town will pursue all available tools to protect agriculture as a viable use of land, and to ensure that high quality soils for agricultural use will be available in the future. Indeed, many believe that more localized food production will be a key component of future economic vitality in our region. Accordingly, support for local agriculture is in line with economic development goals identified by NEDS to establish a culinary trail in Manchester and to support value added food production in town. The town is currently pursuing changes to the zoning ordinance that would allow more rural enterprise activities and light food manufacturing in particular. Other zoning tools include requirements for clustering in residential, commercial, or industrial developments, and allowing the transfer of development rights from farmlands to other lands in the core. These will be considered by the Planning Commission in its development of the proposed new ordinance.

Despite Manchester's relative lack of working farms, agricultural soils are extensive in town and correspond roughly with the Batten Kill Valley and its tributaries. Some of these soils are essentially protected from development because they fall in flood hazard areas. Others may be susceptible to development pressures. Subdivision review should carefully evaluate the presence agricultural soils of primary and statewide significance and measures should be required to protect them. This may involve clustering of lots such that agricultural soils remain on a common conservation parcel. Where subdivision is not proposed, review of commercial projects

should also note the presence of agricultural soils and approvals should include conditions that offer their protection.



Map 2.1. Mapped Agricultural Soils in the Town of Manchester. Mapped agricultural soils are extensive in Manchester, including soils of both primary agricultural importance (shades of green) and statewide agricultural importance (pink and purple).

Source: Vermont Natural Resources Atlas (http://anrmaps.vermont.gov/websites/anra5/)

Other than regulatory approaches to ensuring the economic vitality of local agriculture, the town will encourage opportunities for farmers markets or community supported agriculture programs, as well as farm to table programing in local schools and elsewhere. The town supports the seasonal Manchester Farmers Market by providing its Adams Park location. Going forward, the town will work with the Manchester Farmers Market to ensure its success and ongoing viability. Participation in the development of a Manchester Culinary Trail as identified in the

economic development section of the plan can function as another means of supporting local agriculture insofar as participating businesses purchase foods from local farms.

In addition to these efforts, a few dozen Manchester landowners take part in the state Current Use Program, or Use Value Appraisal of Agricultural, Forest, Conservation and Farm Buildings Property Program. This program allows for the valuation and taxation of farm and forest land based on its agricultural or forest use instead of its significantly higher market value. A total of about 1,000 acres of agricultural lands within the Town of Manchester are enrolled in the program (with about 4,800 acres of forest lands enrolled). The program offers positive means toward protecting agricultural resources that minimize hardship for agricultural landowners and the town will continue to help eligible landowners take advantage of this state program.

Historically agricultural operations have been the cause of significant environmental damage, particularly with regard to water quality and riparian health. This continues to be the case most significantly in Vermont with the water quality of Lake Champlain being significantly negatively impacted by agricultural runoff. Although Manchester does not lie in the Lake Champlain Basin, agricultural practices in town have the potential to negatively impact the water quality of the Batten Kill. Conversion of riparian zone natural cover to pasture or cropland, stream channeling, and implementation of erosion control measures are all practices that threaten stream water quality. Without direct regulatory jurisdiction, municipalities in Vermont must rely on the Vermont Agency of Agriculture, Food and Markets to enforce its Accepted Agricultural Practices and Best Management Practices for agricultural operations to ensure the protection of water quality.

Geologic Resources

The Town of Manchester recognizes its geologic resources as important components of our community wellbeing.

Sand and gravel deposits are abundant throughout the Batten Kill Valley in Manchester, and demand remains strong for these resources (See Map 2.2). As specified in the *Manchester Land Use & Development Ordinance*, mining or extraction must be conducted in ways that minimize adverse impacts upon surrounding lands, prevent depreciation in the value of surrounding lands, and ensure that residential areas are not disturbed by noise, truck traffic, disruption of water supplies, or other impacts related to extractive operations. Extra care must be taken regarding all aspects of extractive activities in highly visible areas, during project review and then during permitted operations.

Following sand and gravel extraction disturbed land must be rehabilitated in a timely manner so that it is usable for other purposes. Land rehabilitation should take place in a phased approach as material is removed, and should not wait until the subject parcel or resource is played out. This will ensure that large areas of land are not laid bare for long periods of time before rehabilitation activity begins and concludes.

Land development continues to depend on a clean and adequate groundwater supply. To ensure maximum yield and quality, areas with high groundwater storage or recharge capability must be protected. Hydrologic features, aquifer recharge areas, and watersheds which replenish surface and ground water supplies providing clean water for public consumption must be protected from incompatible development. The town's wellhead protection area (see Map 3.2 in Section 3.2) should be expanded as needed. From an ecological perspective, the entire town is underlain by an aquifer. Indeed, much of the valley consists of gravel soils, through which water and other



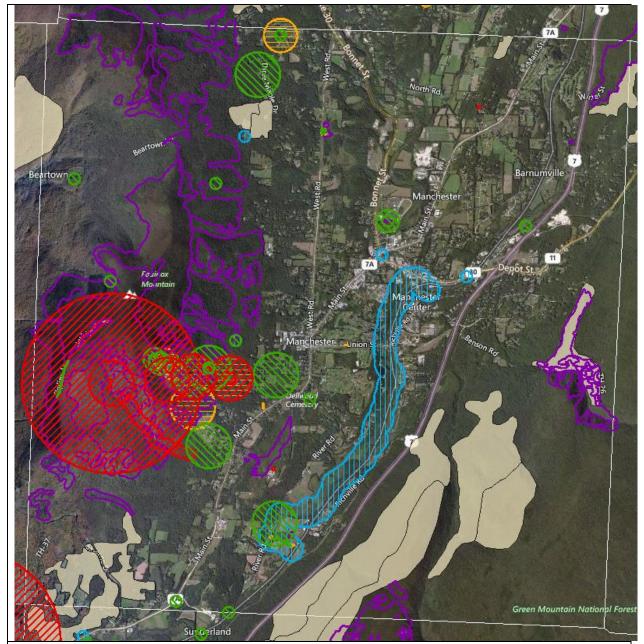
Map 2.2: Sand and Gravel Deposits. Sand and gravel resources as mapped by the Vermont Agency of Natural Resources. Note: Some gravel pits exist outside of these mapped areas within the town.

Source: Vermont Natural Resources Atlas (http://anrmaps.vermont.gov/websites/anra5/)

materials can percolate easily. This increases the potential for contamination of subsurface aquifers. In order to protect the municipal wells, an Aquifer Protection Area has been established in the land use and development ordinance which restricts land uses to those which present low probabilities for contamination. Other strategies will be considered for further protection of water supplies throughout town. More details about the municipal aquafer and protection area is provided in section 3.2 of this plan.

Wildlife Resources

The Town of Manchester recognizes its natural flora and fauna as important components of our community wellbeing.



Map 2.3: Mapped Wildlife Resources within the Town of Manchester. Deer wintering areas shown in tan, crossed hatched circles indicate the presence of rare or threatened species, significant natural communities outlined in purple.

Source: Vermont Natural Resources Atlas (http://anrmaps.vermont.gov/websites/anra5/)

The Vermont Agency of Natural Resources online natural resources atlas identifies a number of rare and threatened species occurrences and important natural communities in Manchester (See Map 2.3). The species sightings include grasses, sedges, flowers, trees, butterflies, salamanders, and bats. Bat populations in general have suffered severe decline in recent years due to White-

nose Syndrome, and Manchester should be involved in state bat monitoring and protection programs. In addition to threatened species, bear, deer and turkey are quite commonly observed in town, along with many other smaller mammals and birds. Moose have also been recently sighted. Each individual wildlife species offers certain and important functions for a healthy ecosystem in Manchester. As such the town seeks to ensure that adequate habitat is available for the continued survival of wildlife populations. Accordingly, the Manchester Conservation Commission has identified habitat connectivity between the eastern and western forested mountain ranges as important to the protection of the town's wildlife resources.

Action: To ensure habitat connectivity for wildlife, the conservation commission will partner with public agencies and private organizations to identify corridors. The commission will work with partners to protect these corridors and install safe pathways across roads or other developed features where needed.

Deer wintering areas, also known as deer yards, provide shelter and browse for deer during extreme winter conditions and are crucial to the survival of deer herds in the region. Deer yards are delineated in the online Natural Resources Atlas by the Vermont Agency of Natural Resources. The atlas shows extensive deer yards within the Green Mountains in the southeast section of town, but limited wintering areas in the Taconic Mountains on the west side of town (See Map 2.3). Fortunately, most of the mapped deer yards fall within the Forest & Recreation (FR) zoning district, which offers protection of these areas to remain wooded. In fact, several acres of mapped deer yard were recently lost at the corner of Beartown Road and Three Maple Drive within the Farming & Rural Residential (FRR) zoning district to make way for a 30 acre horse farm. Several adjacent acres of this mapped deer yard were lost years before to clearing for residential meadows.

Action: The conservation commission will seek to identify deer wintering areas not indicated on the ANR atlas. If such areas are found, the conservation commission, in partnership with landowners and private conservation organizations, will work to encourage their protection by easement or other deeded restriction.

The Vermont Agency of Natural Resources has identified invasive species as the second most significant threat to biodiversity in Vermont and around the world. Invasive species in Manchester include both terrestrial and aquatic threats.

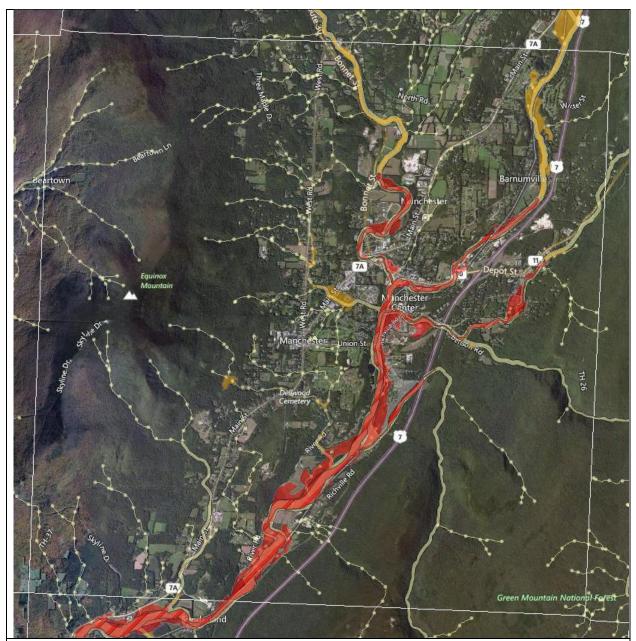
Action: The conservation commission will partner with The Equinox Preservation Trust and other organizations, as well as the State of Vermont, to raise awareness and work to eradicate invasive species from Manchester.

Section 2.3: Flood Resilience

Flood Resilience Mission: Encourage and enact practices that minimize and protect against the loss of life, or damage to health, natural resources and property in Manchester during flood events.

In 2011, spring flooding and Tropical Storm Irene caused extensive and unprecedented damage in Vermont. Consequently, all town plans adopted after July 1, 2014, are now required to address flood resilience. Resilience generally refers to a community's capability to anticipate, prepare for, respond to, and recover from natural disasters with minimum damage to social wellbeing, the economy and the environment. Climate change will result in more frequent and

greater magnitude high discharge weather events; therefore, flood resilience will become increasingly important. On September 27, 2016, the selectboard adopted the *Town of Manchester Hazard Mitigation Plan* (HMP). Hazard mitigation actions are designed to reduce potential losses from natural hazards, including those from floods. That plan is hereby incorporated by reference. The HMP identified flooding and fluvial erosion as the highest priority natural hazard to be addressed with mitigation measures in the Town of Manchester. The town recognizes that maintaining a healthy watershed and providing for limited and well



Map 2.4: Mapped flood hazard and fluvial erosion areas within the Town of Manchester. Yellow shows river corridors as mapped by the Vermont Agency of Natural Resources (ANR). Darker yellow indicates ANR-mapped fluvial erosion hazards. Red indicates extent of 100-year flood (1% chance of annual flooding). Crosshatched red shows FEMA-mapped floodway. Gray shows FEMA-mapped area of 0.2% chance of annual flooding.

Source: Vermont Natural Resources Atlas (http://anrmaps.vermont.gov/websites/anra5/)

controlled development in flood prone locations and along streamside slopes are key elements of protecting our community from flood and fluvial erosion damage. Consequently, healthy watersheds and controlled development in riparian areas must be priorities.

Aspects of a healthy watershed relevant to flood control include limiting the amount of impervious surfaces, maintaining well forested hillslopes, protecting wetlands and groundwater recharge areas, and providing adequate space for both larger rivers and smaller streams to spread laterally during high water events. This includes protecting river-floodplain connectivity by limiting dyking and berming of waterways. It is also advisable to limit river simplification (*e.g.*, straightening of the channel, dredging the channel to increase flow velocity, confining the channel within berms, and removal of roughness elements like large trees that have fallen into the channel) and the armoring of river banks (*e.g.*, installation of rip-rap on banks for erosion control), as these types of efforts simply transfer energy to downstream locations and ultimately may increase the destructive power of high water events.

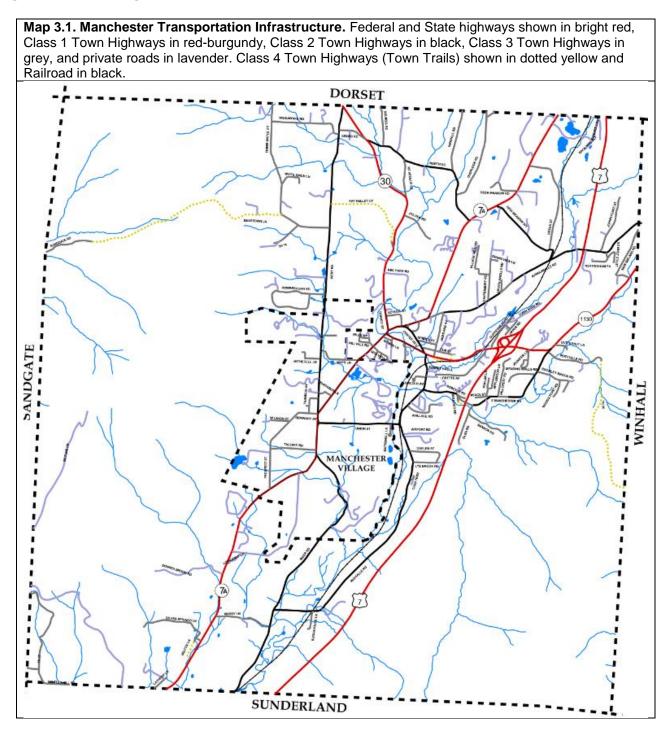
In December of 2015, the selectboard adopted new flood hazard area regulations as part of the *Manchester Land Use & Development Ordinance*. The new regulations prohibit or limit new development and require floodproofing standards for allowable development within these FEMA-defined and -mapped flood hazard areas and ANR-mapped river corridors (See Map 2.4). The ordinance also requires proposed land development plans to provide buffers for adjacent surface waters - including wetlands, lakes ponds, and streams. Furthermore, the ordinance requires all proposed development or redevelopment to provide stormwater treatment and retention on site. Maintaining natural pervious cover and protection of wetlands are among the most important means of minimizing the frequency and intensity of flooding and fluvial erosion. *The town will administer and enforce its flood hazard area and surface water regulations and encourage the implementation of other mitigation measures to realize the goal of being a flood resilient community*.

The town recognizes that resilience extends beyond mitigation of flood and fluvial erosion hazards. As articulated in *Vermont's Roadmap to Resilience: Preparing for Natural Disasters and the Effects of Climate Change in the Green Mountain State* (Institute for Sustainable Communities, 2013) Vermont communities need to recognize potential impacts of climate change beyond flooding and build resilience to other potential disasters, including drought, wildfires, and winter storms. *Recognizing that resilience extends beyond flood mitigation, Manchester will pursue further articulation of risks, mitigation measures, and planning toward community resilience, particularly through updates to the Manchester Hazard Mitigation Plan.*

Section 3: Services: Transportation, Utilities, Public Health & Safety, Education

Section 3.1: Transportation Infrastructure

Transportation Mission: Develop a multimodel transportation system that functions well for all users.



Manchester recognizes that desired transportation improvements are significant, and will not be accomplished all at once. It is important to keep a long-term perspective, so that incremental improvements are achieved within the context of the big picture. It is also essential that infrastructure is designed to meet general needs throughout the year, and not be overbuilt to accommodate peak demands at limited times of year. Transportation infrastructure should be designed in an integrated fashion, with opportunities to share needs between a mix of uses in both time and space, especially where evening peak demand overlaps little with daytime needs. The town maintains and resurfaces its roads on a planned rotation cycle, so as to avoid the greater costs and problems associated with delayed maintenance and roadbed deterioration. In order to minimize the escalation of cost over time, the town's policy has been to maintain existing paved roads, but not to pave additional roads.

Downtown

After a 1994 transportation study, and the development of the 1996 Commercial District Parking and Pedestrian Plan, Manchester pursued redefinition and implementation of desired patterns of land use through changes to the zoning ordinance. Since then, the town has focused on downtown improvements, creating a more pedestrian-friendly environment, more effective pedestrian and vehicular links between commercial projects, and more effective intersection design, all of which help the transportation network to function more efficiently. Most significantly, in 2014 the town realized the long planned redesign of what was widely known as Malfunction Junction at the intersection of Vermont Routes 7A and 11/30. A full roundabout at the Depot Street-Main Street intersection and a button roundabout at the Bonnet Street-Main Street intersection is now referred to as Function Junction, and has received wide praise for resolving traffic problems in Manchester, particularly during peak tourist seasons.



Figure 3.1. Depot Street Redesign, Preliminary Preferred Alternative. Bike lanes are to be added on both sides of the street, vehicular lanes are to be narrowed, greenspace is to be added between the sidewalk and road on at least one side of the street, and crosswalks will be added.

Aside from the roundabout project along Main Street, the design and functionality of Depot Street has long been subject to community discussion. A Depot Street Corridor Study was

conducted in 2004 to explore alternatives aimed at improving traffic and pedestrian conditions along Depot Street in line with the town's adopted vision statement.² That was followed by a Depot Street Study in 2014 that further refined alternative designs for Depot Street. In 2016, with \$580,000 in state transportation funding, the town engaged an engineering firm and a planning firm to accomplish the Depot Street Bicycle and Pedestrian Enhancement project. This project aims to redesign Depot Street to offer safe pedestrian and bicycle amenities currently lacking along this corridor. The public design process has progressed to an accepted alternative that is being further engineered (see Fig. 3.1). Completion of the project will coincide with the state paving schedule for Route 11/30, expected in 2018 or 2019. In 2017 the town plans to apply for a \$350,000 state grant to pay for street lights and traffic light upgrades on Depot Street.

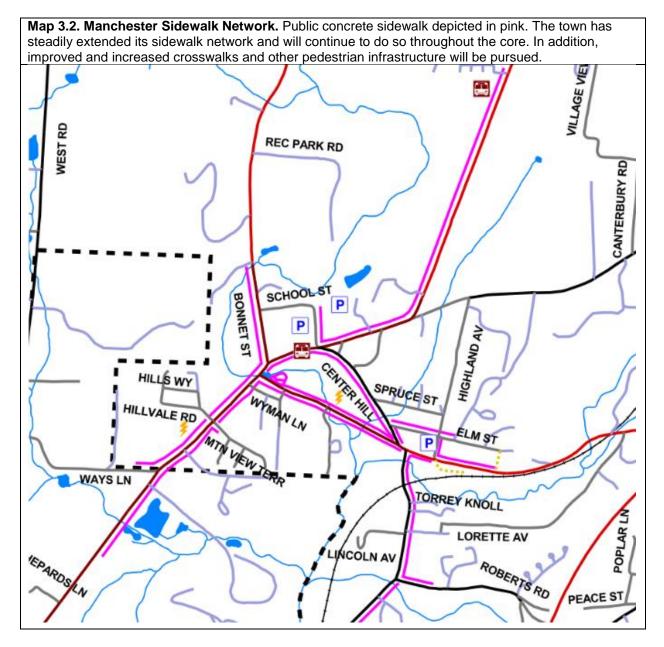
Downtown parking and traffic have been debated at length over the years, typically, with regard to answering quantitative questions: how many cars, how many parking spaces, how much traffic? We now know that the qualitative questions are more important in mitigating traffic issues: where are parking spaces located, is there provision for pedestrian links, is there coordination and consolidation of curbcuts, and what difficulties arise when visitor traffic is heavy? It is now widely recognized that good access management (*i.e.*, fewer curbcuts), greater connectivity, mixed uses and enhanced bike and pedestrian amenities tend to alleviate traffic and parking issues.

Nonetheless, amount, location and design of parking facilities remains a matter of community concern, and in December 2016 the town was awarded a \$19,333 municipal planning grant from the Vermont Agency of Commerce and Community Development (ACCD) to fund the creation of a downtown master plan that will include a parking analysis. The master plan will also address unresolved safety issues arising from the parking and drop off patterns at the Manchester Elementary and Middle School (MEMS). In the meantime, the town is working with the Manchester School Board to design alternative configurations for MEMS with input from parents, administrators, and other community members. These design alternatives will be considered in the development of the downtown master plan. The downtown master plan project will involve a public planning charrette in conjunction with the annual meeting of the Northern New England Chapter of the American Planning Association (NNECAPA) to be held in Manchester in September of 2017. In addition to addressing parking needs in the downtown and ways to establish safe routes to MEMS, the charrette and resulting master plan will address other bike and pedestrian needs in the core.

Rather than design streets or sites for the convenience of vehicular travel as was done through much of the 20th Century, we now design for the convenience of people using all modes of traveling through town. This includes centrally-located, safe and convenient parking areas, a safe and convenient sidewalk network, safe and well-marked crosswalks, bicycle lanes, amenities such as benches, mini-parks and greenways, and other design elements that encourage people to park their cars and walk or bike throughout the town. The town will encourage public-private partnerships to accomplish these multimodal connections, whether through direct funding or other mitigation strategies, with the private sector paying for a share of these improvements in conjunction with commercial or large residential development approvals.

2

² "Our 'downtown' development will follow the classic village pattern. It will be pedestrian oriented – human in scale. It will replace the prevailing 'suburban' development pattern in which buildings are sited to accommodate the automobile. [...] We will reduce the detrimental effect of automobiles on our quality of life and sense of community. We will create a carefully designed network of attractive sidewalks, walkways, and bicycle paths which will be well maintained in all seasons." – A Community Vision for Manchester, November, 1994



The following transportation policies are in line with 21st Century norms of designing for all transportation users rather than just automobile drivers:

- Curbcuts should be as narrow as possible while serving vehicular needs.
- The number of curbcuts should be reduced or minimized by closing curbcuts and consolidating access with or between adjoining parcels or projects.
- Sidewalks that cross curbcuts should be constructed of a different color, material, and/or texture to help clarify these areas as safe havens for pedestrians.

Appropriate traffic mitigation for new development falls into two categories: on-site and off-site improvements. On-site improvements typically include project-specific needs, and may include

intersection improvements, public sidewalks, closing curbcuts, sharing and consolidating curbcuts and parking areas, bicycle parking facilities, provision for public transit, benches and other pedestrian amenities, easements for or construction of walkways and driveways creating off-street links between projects, street trees, and other similar design enhancements. Off-site improvements may include contributions toward broader identified needs (such as improvement to public parking facilities) that are beyond the scope of any single development project, and beyond the ability of the town to finance on its own. High traffic generators, such as drive through fast food restaurants and drive through banks must not access directly to Main Street, Depot Street, or Bonnet Street. Access to a side street should not be less than 100 feet from the intersection of that side street and any of these three main streets.

To further enhance the pedestrian-friendly nature of Manchester, and to discourage reliance on cars, the town has improved and expanded its sidewalk system. In concert with private landowners, who are required to rebuild sidewalks and curbs to town specifications in conjunction with commercial development projects, significant progress has been made in this arena. Other areas noted for possible future sidewalks include further extension along Richville Road; East Manchester Road, from the Post Office heading east toward relatively densely developed residential areas; Barnumville Road, from the intersection with Main Street at least to Highland Avenue, if not beyond; and Main Street, from the intersection with Barnumville Road to Cemetery Avenue, where the new Manchester Community Library is located.

In 1997 the Town of Manchester established a park and walk program with seed money from the High Ridge development court settlement. The program included signage and shared parking arrangements with various commercial developments along Main Street, Bonnet Street and Depot Street. Wayfinding kiosks were also installed, as was the town's first roundabout to serve Shaw's and the new High Ridge development. Most of the High Ridge development has been recently demolished to make way for the Hampton Inn and three associated commercial buildings. The wayfinding kiosks, which were maintained by the now defunct Manchester and the Mountains Chamber of Commerce, fell into disrepair and are actively being removed by the town. The park and walk signage has also suffered deterioration and is in need of replacement.

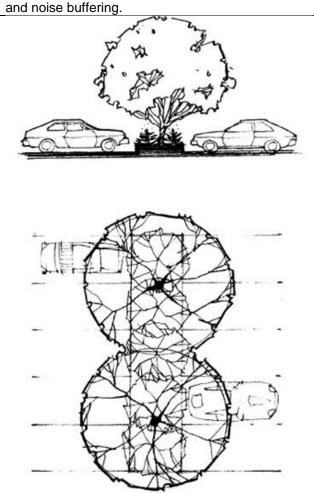
In place of the wayfinding kiosks, town staff is pursuing identification of its facilities on Google Maps. Most local businesses are indicated on Google Maps and although some of the town's facilities are identified, others, such as municipal parking lots are not. In addition, the town will work to systematically replace the original wooden park and walk signage with metal, MUTCD-compliant³ signage within the public rights-of-way. Locating the signage within the right of way will allow regular municipal maintenance and better prevent deterioration that resulted from less straightforward shared access and maintenance arrangements on private property. Town officials will encourage and seek continued cooperation from commercial operators for access to shared parking for all visitors to the downtown area.

While development may be seen as the cause of traffic problems, development may also serve, or be used as a tool, to help solve some of those same problems. The zoning bylaws as they are being recrafted, will guide development toward desired patterns that improve pedestrian linkages and amenities. Where consistent with this plan, and when clear and compelling benefit to the town is demonstrated, the boundary of the commercial zone may be changed to follow natural features or contours, follow existing parcel or project boundaries, allow commercial development in appropriate locations, or allow effective parking to be created. However, any non-residential uses which adjoin residential land must provide substantial screening and

³ Manual of Uniform Traffic Control Devices

buffering in order to minimize or prevent adverse impacts upon adjoining residential lands. Measures should be taken to minimize or prevent impacts including but not limited to noise, odor, traffic, heat, light, glare, dust, vibration, and security. Non-residential uses must not channel significant traffic onto local or connector streets in or near residential areas.

Figure 3.2. Example of parking lot landscaping with year-round screening for aesthetic beauty, shade, and noise buffering.



The town will seek to re-establish, enhance, and encourage or facilitate services provided by mass transit providers. Regular, cost effective, energy efficient transit, whether by bus, rail, or other means, will become ever more important in the future, whether within town, for daily commuting between towns, or other long distance travel. High priorities include maintaining the existing commuter bus services linking Manchester with both Bennington and Rutland, as well as re-establishing long distance bus or other transit opportunities linking Manchester with the Albany to New York City corridor.

Parking facilities should be designed, consolidated and reconfigured in ways that maximize the effective use of land, while providing appropriate design, pedestrian and vehicular links, and screening. Consideration must be given both to patron traffic, as well as service and emergency vehicles. Parking areas must be screened or hidden as much as possible, ideally behind buildings. Creative landscaping and screening should also be used as a buffer between parking lots and sidewalks or residential areas, and to provide delineated pedestrian pathways, screen cars from the road, provide shade, and provide yearround color and aesthetic beauty.

Creative approaches should also be used where appropriate, including payment in lieu of parking, shared parking, or other strategies. Shared parking is encouraged within or between projects or lots, and may be on-site, on adjoining land, or off-site. Shared parking arrangements should acknowledge actual, on the ground needs during normal business conditions, not just theoretical distinctions in time and space. Satisfying temporary, peak demands for roadway capacity or parking supply would be wasteful and counterproductive. Creating effective parking is the goal, ultimately through multiple strategies that provide a better balance between supply and actual demand in both time and space. This may also include encouraging better use of existing public parking through promotional efforts in partnership with the private sector.

Another way of lessening traffic impacts is to minimize or avoid the need for traffic. Commercial and residential projects should be designed to help satisfy this goal. Mixed use developments, especially those which include housing; shared parking lots; off-street pedestrian and vehicular

links between projects; and pedestrian & bike paths which feed into an overall greenway plan are all design examples that help realize this goal. Manchester will continue creating incentives to encourage such designs. Lowering or removing density requirements for housing when part of a mixed-use project in the commercial core is one possible incentive that can be offered.

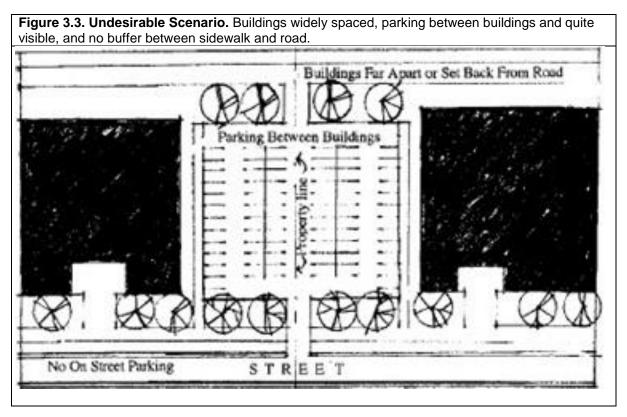


Figure 3.4. Desirable Scenario. Buildings closer together, parking well-screened and behind buildings, on-street parking, significant street tree plantings, greenspace buffer between sidewalk and road.

Parking Behind Buildings

Buildings Close Together or Attached

On Street Parking

S. T. R. E. E. T. Street Tree Plantings

Scenic Roads

The Town of Manchester recognizes its scenic roads as important components of our community wellbeing seeks to protect these assets.

Two designated scenic byways run through the Town of Manchester. They are the Shires of Vermont Byway and the Stone Valley Byway. The Shires of Vermont Byway begins in Pownal at the Massachusetts border and runs along Route 7A to Manchester, where it continues on Main Street until turning onto Depot Street and terminating at the Route 7 interchange. The Stone Valley Byway begins at the Bonnet Street intersection with Main Street and courses north along Route 30 all the way to Hubbardton. These scenic byways are recognized officially, protected under state statute, and marketed by the state's tourism department. These roads are often lined by stone walls and sugar maples, and provide especially scenic views, as well as historic sites. Other roads in Manchester also provide such scenic amenities, including Barnumville Road, East Manchester Road, Overlook Road, Richville Road, River Road, West Road and Wind Hill Road. Public or private actions which would impact these roads must be carefully evaluated, and development must be planned to minimize adverse impacts.

In addition to traditional engineering considerations, rural character, natural topography, and scenic corridors should be considered when designing new roads in Manchester. Roads that are wider than necessary cause the destruction of trees, stone walls, and other features integral to the area's rural character. In order to protect the town in the future, appropriate rights-of-ways must be dedicated, and roadbeds constructed, to town specifications. However, the constructed road width should be appropriate to the traffic flow anticipated. The town will reserve or allow sufficient rights-of-way for longer-term future needs, and yet avoid building roads that are wider than necessary and negatively impact the scenic qualities that are essential to Manchester's community well-being.

Recreation Pathways

The Town of Manchester values recreation pathways and seeks to support the expansion of such a network in town.

The Manchester community has long expressed a strong desire for a greenway network of pedestrian, cross country ski, and bicycle paths that would link the outskirts of town with the downtown. Although debate about the extent of public funding and the particular locations of pathways continues, the town supports the concept. Such a network would improve opportunities for non-motorized travel within the core, while creating new recreational opportunities close to town for residents and visitors alike. In line with this desire, public sidewalks should be continuous throughout the entire downtown, and should connect with adjacent neighborhoods. Provisions for pedestrian and bicycle travel should be incorporated into all private developments and public works projects. Consequently, links should be made between new development and adjoining paths, bike racks should be provided, sidewalks should be extended along bridges, ample crosswalks should be provided throughout the town core, and roadway shoulders should be paved and adequately stripped wherever possible. Furthermore, Manchester employers should be encouraged to provide appropriate facilities, including showers and secure bicycle storage, in order to encourage energy-efficient commuting.

The 1996 Manchester Commercial District Parking and Pedestrian Plan evaluated six potential corridors that would comprise a network of recreation pathways. Of the six, a spur from MEMS through the Dana Thompson Memorial Park and on to Riley Rink has been developed. Other

corridors include a Manchester Depot spur running roughly parallel to Main Street from Town Hall to Barnumville Road and then continuing south to Depot Street roughly parallel to Highland Avenue along an abandoned rail bed and ravine. Two of the spurs essentially run along the Batten Kill through the downtown, corresponding at least partially with what the Manchester Riverwalk hopes to establish as a public pathway along the river. The fifth spur would link the Batten Kill with the Equinox Hotel in Manchester Village. In the coming years, the town will revisit the feasibility of developing these corridors in conjunction with Manchester Village, Manchester Riverwalk and private landowners along the identified corridors. In addition, a town meeting vote in 2016 authorized town officials to pursue planning of a northerly spur linking Riley Rink to North Road along the old OMYA railroad bed. This effort is being conducted in cooperation with the owners of the old rail bed as well as landowners whose land may need to be traversed to connect the rail bed to existing recreation path at Riley Rink. In addition, easements or land exchanges may be sought to address concerns about proximity of the rail bed to existing residences.

Section 3.2: Municipal Utilities

Municipal Utilities Mission: Maintain a safe and functioning water and sewer infrastructure that efficiently serves residents, businesses and institutions into the future.

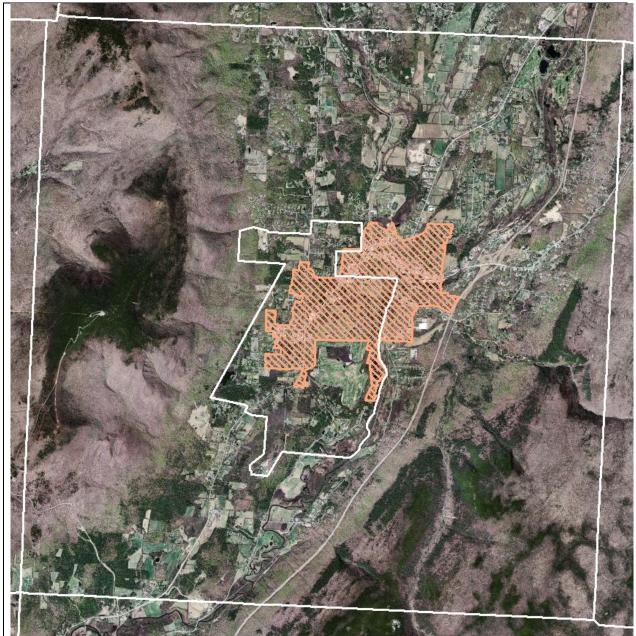
Sewer System

The town's sewer treatment consists of a lagoon system relying on natural algal and bullhead fish populations to aid the treatment of wastewater. Additional secondary level treatment includes disinfection and dechlorination to increase the quality of the effluent, and minimize adverse impacts upon the Batten Kill. With average flows of 350,000 gallons per day (GPD), the sewer plant is not yet operating at capacity. Capacity can be expanded by changing some operating procedures, and by minimizing groundwater infiltration into the system. The town is actively pursuing these approaches at this time, which are more cost effective than adding new capacity. As we approach 80% capacity, the state will require engineering redesign and capital funding for expansion of the system.

Under optimum conditions, it is estimated that the plant may be able to treat approximately 1,000,000 GPD. However, the limiting factor at this location is the assimilative capacity of the Batten Kill. Initial discussions with the Vermont Department of Environmental Conservation suggest that an increase from the current permitted 600,000 GPD to 750,000 GPD could be permitted, depending upon the quality of effluent discharged, and the assimilative capacity of the river. The town will continue to analyze capacity to determine future options. In the meantime, the town will guard and allocate wisely its limited capacity, to maximize options and minimize future costs.

As additional allocation is awarded to new development, different kinds of uses must be carefully considered with regard to their particular effects on the existing lagoon system. The system is not designed for industrial wastewater with high oxygen demands. Although expanded residential allocation may pose no threats to the functioning of the current treatment system, certain other uses potentially may. A slaughterhouse, for example, would increase biological oxygen demand (or BOD, the amount of dissolved oxygen required to break down organic matter) significantly and compromise the existing system. Restaurants with garbage disposal grinder pumps could significantly increase settleable solids and thereby threaten the system. Various industrial, research or artisan uses may involve heavy metals that could contaminate the

sludge and thereby increase the costs of disposal. Other uses, such as brewpubs, may significantly change the pH of the treatment system and thereby threaten its functioning. Although, certain pretreatment measures for these uses are possible, failure of pretreatment could permanently damage the lagoon system. Therefore, significant allocation to these types of uses would likely require the town to move to an activated sludge treatment system that would require a newly engineered facility and significantly increased staff.



Map 3.1. Sewer Service Area. The sewer service area (SSA) is shown in orange, with municipal boundaries shown in white. A majority of the SSA falls in Manchester Village, although Manchester is considering limited extension in the town along Richville Road and Main Street.

Source: Vermont Natural Resources Atlas (http://anrmaps.vermont.gov/websites/anra5/)

The area that the town has determined can be served economically and efficiently with municipal sewer, and which is appropriate for higher density development, is referred to as the

Sewer Service Area (SSA), shown in Map 3.1. Expansion of the SSA is encouraged where clear and compelling benefit is demonstrated for the town and the sewer system. Given limited capacity, a key policy question for the planning and sewer commissions is whether land within the existing SSA should be served before expanding to serve additional land. Extensions of sewer lines outside the SSA have been discouraged historically. However, given the effort to allow more intensive use of the core, especially denser residential use, the town is considering expansion of the SSA along Main Street north of Barnumville Road. In addition, the state is urging the town to consider extending sewer service south to Cass Terrace along Richville Road to better protect the municipal aquifer in this area. Even in the rare instance where the town allows the extension of service lines outside the boundary of the sewer service area, increased development densities must be carefully evaluated. The town must keep a close watch on current and projected growth, so that sufficient time is available for informed decision making regarding any upgrades or expansions that may be needed as sewer capacity limits are approached.

Expansion of sewer service along Richville Road south of Green Mountain Estates would achieve a major goal of the Water Department – further protecting the town's well heads located near the intersection of Richville Road and Union Street – and as such, the Water Department will participate to some degree in any expansion of sewer service on Richville Road. Ideally, this would be done in combination with the development of the town-owned land (located adjacent to the Old Airport Industrial Park and currently zoned Industrial) and possibly funded by the creation of a sewer assessment district as well as a Tax Incremental Finance (TIF) district, related to the town-owned land. As contemplated, one end of the sewer expansion would start at Cass Terrace and gravity feed to a new pump station located at the southern corner of the Water Department on Richville Road. The other end of the system would gravity feed from Green Mountain Estates, eliminating the existing pump station and connecting to the new pump station, which would pump under the Batten Kill and directly into the sewer treatment plant. Carlan Street and Lye Brook Road would be included in the expansion and sewer and water service would be extended to the town-owned land off of Airport Road. The estimated cost is about \$6 million dollars.

Wastewater Service Policies & Actions

The Wastewater System Master Plan, developed in 2010 by Dufresne Group Consulting Engineers, guides maintenance, planned improvements, and continuing evaluation of the town's sewer system infrastructure. In addition, the town identifies the following policies and actions regarding its wastewater treatment system:

- Require connection to the municipal sewer system for all new development or redevelopment proposed in the town core within the sewer service area.
- Pursue strategies to expand capacity by minimizing infiltration, and maximizing system efficiencies.
- Evaluate, the assimilative capacity of the Batten Kill, to determine the maximum permitted treatment capacity of the plant.
- Maintain the existing sewer service area, and extend only where clear and compelling benefit to the town and sewer system is demonstrated.
- Extend the sewer service area to serve existing development along Richville Road within the wellhead protection area.
- Extend the sewer service area north along Main Street to serve existing and potential new development, particularly residential.

• As capacity of the current system is approached, evaluate feasibility and cost of converting to tertiary treatment.

Water System

The Manchester Water Company, established in 1894, operated as a privately-owned enterprise until April, 1980. The Town of Manchester then purchased the system for \$361,500, and will pay off the municipal bond that financed the purchase by June 30, 2018. During the mid-1980's, the town upgraded the water system with a new subsurface well and pump station, covered storage tanks, and new water lines. Since then, the town has embarked upon an aggressive program of improvements, including leak detection, replacement of old water mains, and replacement of water meters. Such improvements help maximize system efficiency, thus extending its service life, forestalling the need for costly capacity upgrades, and improving revenue through greater capture of billable flows. Replacement of old mains continues, including planned replacement of original 1894 pipes along Main Street serving Manchester Village in the next few years. If possible, the work will be coordinated with the state paving schedule for Route 7A to save the town significant expenditure toward paving. This project will cost between 150,000 and 1.6 million dollars depending on whether existing pipes can be lined or will require full replacement. In order to determine project cost, the mains will need to be visually scoped and the town will issue new municipal bonds to cover the costs.

Batten Kill Wells and Pump Stations

All source requirements for municipal water service in Manchester, for both the village and the town, are presently satisfied by the primary Batten Kill well and an adjacent, secondary backup well. The Batten Kill wells tap a gravel aquifer which extends in a north to south direction along the river. These wells have a theoretical total capacity of roughly 5,000 GPM (gallons per minute). However, current pumping capacity is designed for only 1,400 GPM. As with the sewer system, continued growth and development add demand. Manchester can extend the life of the wells by continuing to pursue system efficiencies, and guarding new allocations carefully.

Much of the valley lands in Manchester is underlain by gravel soils, through which water and other materials percolate easily. This increases the potential for contamination of subsurface aquifers. In 1984 the first Batten Kill well was put into use. State health regulations required that a well head protection area be delineated to protect the municipal water source. Well head protection areas consist of zones of decreasing levels of protection with increasing distance from the well head. Zone 1 consists of a 200 foot radius surrounding the well. Zone 2 consists of the area from where there will be probable impacts from potential sources of contamination. Zone 3 consists of the remaining watershed area of contribution to the well. In 1988 the backup well was installed requiring a new well head protection area be delineated for both wells. The entire well head protection area, along with Google imagery, is depicted on Map 3.2.

In 1989 the town adopted the Aquifer Protection Area (APA), an overlay zoning district that generally corresponded to Zone 2 of the well head protection area as mapped by engineering firm Dufresne-Henry in 1988 based on appropriate hydrogeological study of the aquifer area. The APA restricts land uses to those that present low probabilities for aquifer contamination. In 1996 in accordance with State of Vermont public health standards and after the second more southerly well was employed, engineering firm Dufresne-Henry recommended extending the APA southerly to include the portion of Zone 3 falling west of Route 7 to the Batten Kill. The remainder of Zone 3 east of Route 7, consisted of national forest lands and rural residential properties with limited potential for development that were therefore not considered likely to

threaten the aquifer. A small portion of Zone 3 falls on the west side of the Batten Kill, but this area falls within Manchester Village, which maintains a separate zoning ordinance. Consequently, the town extended the APA to its current limits in 1997. Town officials are currently considering new ordinance provisions that would include the entire mapped wellhead protection area in an Aquifer Protection Overlay (APO) district, but would conditionally allow some uses within zone 3 that would continue to be prohibited in Zones 1 and 2.



Map 3.2. Wellhead Protection Area. Manchester's sourcewater is protected by a delineated wellhead protection area within which various land use activities are encouraged or discouraged depending on whether they might threaten the public water supply.

Source: Vermont Natural Resources Atlas (http://anrmaps.vermont.gov/websites/anra5/)

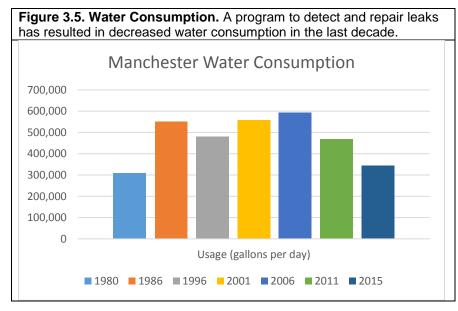
The pump station includes an 800 gallon per minute pump and a 500 gallon per minute pump, both of which fill the town's two storage tanks. The east tank holds 850,000 gallons, and the west tank holds 500,000 gallons. Well water is chlorinated and pumped into these two tanks, which are at an elevation of 1100 feet (336 meters). Operation is controlled by a telemetry

system, which was improved in 2003. Energy and functional efficiencies were also improved in 2003 with the installation of a variable frequency pump. The town received a grant from Efficiency Vermont to help with the up-front cost.

Pursuant to Vermont water supply rules, the town maintains a Source Protection Plan (SPP) for the Manchester Water Department. Originally prepared in 1995, the SPP is updated every three years. It involves inventory of properties, uses, monitoring activity, and public outreach efforts within the well head protection area, as well as recommendations for further actions. New information gained in a 2005 study added further insight into subsurface flows and the impact of well pumping on the aquifer. This is useful information on its own, and has already helped improve proposed development plans in this vicinity. Other strategies may be considered for further protection of water supplies throughout town, such as the 2006 purchase of land adjacent to the well.

Water Consumption

The town has recently largely addressed a long standing problem of water unaccounted for in gallons billed as compared with gallons pumped. In 2006, this ratio averaged about 62%, leaving about 1/3 of pumped water unaccounted for. In the first three quarters of 2006, this meant that an average of nearly 18,000,000 gallons of water per quarter were lost. Manchester pursued an aggressive program to detect and repair leaks in the system. Through the Capital Improvement Program, the town also continues to plan for replacement of old water lines, some of which date back to the 19th century. System wide replacement of water meters is also occurring to ensure that water used is actually paid for. New meters can be read by radio device, which will also improve the accuracy of meter reading and billing.



According to the town's water and sewer superintendent, the Batten Kill wells appear to have adequate hydraulic capacity to serve Manchester's rate of consumption. However, similar to state rules governing the sewer system, when the system reaches a certain threshold of capacity, planning for and eventual construction of system upgrades will be required. These are significant capital

expenses that also have other implications such as expansion of the wellhead protection area.

Water Service Policies & Actions

- Continue to pursue system upgrades to maximize system efficiency.
- Protect the municipal aquifer from potential contamination by carefully monitoring and controlling activities within the wellhead protection area.

- Support the expansion of sewer service for existing and new development within the wellhead protection area.
- Carefully monitor increases in water usage and allocation and be prepared for system expansions, including expansion of the wellhead protection area, as capacity is approached.

Section 3.3: Power & Telecommunications Facilities

Manchester recognizes the importance of efficient and functioning electrical power and telecommunications facilities, and will work with utility providers to ensure that siting of facilities is accomplished in a manner that protects the scenic, cultural and natural resources of the town.

Electric power is supplied to the town by Green Mountain Power (GMP), a regulated utility under the jurisdiction of the Vermont Public Service Board, having merged with Central Vermont Public Service Corporation (CVPS) in 2012. Significant concerns regarding the so-called "Southern Loop" portion of the electrical grid that serves the region were identified by CVPS in 2006. Issues included whether there was adequate supply of power at peak times, and adequate transmission capacity even if supply existed. CVPS undertook an outreach campaign in 2006 seeking input from various stakeholders on ideas and strategies that might solve these problems and be acceptable to communities. Support appeared to emerge for four strategies:

- 1. Conservation and increased efficiency
- 2. Installing a synchronous condenser on the existing transmission line to improve stability and flow of power
- 3. Replacing a key transformer at Vermont Yankee to avoid the lengthy disruption that could occur if this were to fail, and
- 4. Distributed generation that is, smaller scale, indigenous power production.

Vermont Yankee has since ceased generating power and a synchronous condenser was installed, but conservation, increased efficiency, and distributed generation remain important.

In the past, electrical transmission and distribution lines have been located primarily at the convenience of the electric company, with little regard given to aesthetic or environmental concerns. The town is concerned about tree trimming done by the power company, which tends to have adverse impacts upon the beauty and longevity of trees. While important throughout town, this is of special importance in the downtown area, where great emphasis is placed upon streetscape design and street tree planting. While respecting and appreciating the need for a reliable electric supply, street trees are important to the town's vitality and ways to protect them from trimming by the electric utility should be pursued. The provision of underground utility lines or other techniques (such as rerouting power lines behind buildings) to minimize visual impacts in developed areas, particularly in areas having special design and improvement priorities, will be pursued. Electric or utility lines and related infrastructure should be installed so as to minimize aesthetic and ecological impacts.

When planning new lines or upgrades to existing lines, special consideration should be given to any primary or secondary impacts that would reduce resource values (including but not limited to aesthetics and streetscape design, agricultural and timber resources, natural areas, and historic sites). When a new electrical transmission corridor is planned, it must be demonstrated that the proposed location is necessary based upon economic considerations, potential impacts on resource values, and the resulting public benefits. Where improvements are planned, such as

those for major downtown streets, the utility company will be encouraged to install underground lines, or to use other suitable techniques to minimize the visual impacts of transmission lines and poles. These strategies were demonstrated in the heart of the downtown as part of the Junction Roundabout project, and will be pursued as much as possible with the Depot Street Enhancement project. In addition, the Downtown Master Plan charrette process to occur in September 2017, will address a plan for relocation of the substation from Depot Street-Center Hill Road to an alternative location outside of the Depot Street gateway area.

Upgrading or constructing new power lines must be done in ways that consider and balance the need for a reliable power supply while minimizing adverse impacts on land and valuable resources. Except where improvements can be made, existing power line corridors should be used whenever possible. In order to enhance the aesthetics and visual character of the downtown area, public utilities (including but not limited to power lines, substations, and telecommunications facilities) should be relocated from public view along main streets wherever possible. This may include behind buildings, away from the street, along streets, or underground. Where this is not possible, these should be screened from adjacent properties with dense coniferous plantings. Accordingly, with regard to wireless telecommunications facilities, the *Manchester Land Use & Development Ordinance* requires conditional use review of all proposed development and siting of towers and related infrastructure. Visual impacts, lighting, noise generation, natural resource impacts, and site screening are all required to be carefully considered by the Development Review Board prior to approval of any new facilities.

Action: The town will pursue strategies to promote, encourage, and support the burial of utility lines, particularly in the downtown core to enhance the historic streetscape.

Section 3.4: Public Services

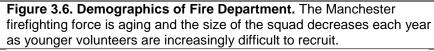
Municipal Services Mission: Encourage and maintain efficient municipal services that support an affordable and high quality of life.

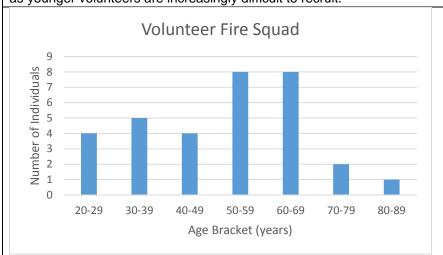
Town Administration & Public Safety Services

In 1991, Town Hall was relocated from Depot Street to a facility on Main Street, in the former Mount Laurel Building. Offices for the Town Manager, Planning & Zoning Department, Town Clerk, Finance Department, and Assessing Office are found here. The building also serves other public functions, including the Meals on Wheels kitchen, a weekday senior meal program, senior exercise classes, and the Manchester Community Food Cupboard. This site will accommodate town government for the foreseeable future, and continue to provide space to non-profit organizations serving the Manchester community. The Town Hall parking lot also serves as a bus stop for the regional daily buses linking Manchester to Rutland and Bennington.

Manchester maintains a professional Police Department, staffed by a Chief of Police, eight police officers, and four full-time dispatchers. The Fire Department is staffed by a volunteer force of 32 individuals. In addition, the Manchester Rescue Squad (serving Manchester, Dorset, East Dorset, Mt. Tabor, Danby and parts of Winhall with 24/7 paramedic coverage) is staffed by 28 individuals. In 1996, the Manchester Police Department, Fire Department and Manchester Rescue moved to a new, combined facility located at the Town Hall site on Main Street. The public safety building provides space for equipment, personnel, and support for police, fire and rescue, and will continue to accommodate each department's needs for the foreseeable future.

A long-standing and continuing challenge is maintaining an adequate complement of volunteers to staff Manchester's busy emergency services. This was a particular problem for the rescue squad, an independent non-profit organization, whose call volume increased dramatically a number of years ago and it ceased being an all-volunteer squad. With a sustained average of over 1,200 calls per year, the squad now employs six full-time professional emergency service technicians and paramendics, 16 part-time, and six volunteers.





The Manchester Fire Department faces a similar problem in maintaining a full roster. The department is aging and increasingly unable to recruit new and younger volunteers. With a rooster of 38 individuals in 2015, the number fell to 32 in 2016. This is an issue that rural volunteer fire departments are experiencing nationwide, and one that has led to consideration by the selectboard of the

necessity of a paid force in the future. The town is thankful for the dedicated volunteer firefighters, and for local employers who allow their employees to remain on the payroll while responding to emergencies. Manchester must do what it can to support the continuation of the current volunteer system, which has been effective in meeting community needs, and which is extremely cost-effective as compared to the resources needed to maintain professional fire and squads. However, the town must consider alternatives as the volunteer force continues to age and shrink.

Solid Waste Management

The Town of Manchester recognizes the importance of reduced solid waste generation both to protect the environment and reduce costs.

Manchester is a member of the 13-town Bennington County Solid Waste Alliance (BCSWA). As such it is party to the BCSWA Solid Waste Implementation Plan dated December 14, 2015. In line with Vermont's Universal Recycling Law (Act 148), passed unanimously by the state legislature in 2012, participating municipalities aim to reduce the amount of waste disposed in landfills through reduced generation, appropriate diversion to composting or recycling streams, and conservation and reuse of materials. The BCSWA plan establishes a goal of 25% reduction of solid waste generation from 2015 levels by 2025, and 50% reduction thereafter. Residents of Manchester can dispose of their trash for a fee, and can recycle a variety of materials for free at the Sunderland and East Dorset transfer stations operated by Casella Waste Systems, Inc. In addition, local haulers, including Casella and TAM Waste Management, Inc., remove solid wastes from residential and commercial customers throughout town in compliance with Act 148.

Health Services

Health Services Mission: Promote and support opportunities for expanded health care options in Manchester.

The Southwestern Vermont Medical Center (SVMC) in Bennington serves as the primary hospital for the region, although some residents choose the Rutland Regional Medical Center. Each is at least a 30-minute drive from Manchester. Fortunately, medical offices in Manchester, affiliated with both hospitals, do offer some major medical services. Nonetheless, the area is underserved by medical practitioners. Many will not accept new patients at this time, and several physicians have either moved away or changed to a concierge type of practice that serves far fewer patients than before. Currently, there is an effort by two local physicians to open an urgent care center in Manchester's core. The town has supported this effort as these physicians seek a certificate of need from the Green Mountain Care Board. Such a facility would fulfill tremendous need for urgent care in the town and the Northshire in general. In order to meet community needs now and into the future, continued efforts must be made to determine the best ways to facilitate greater provision of medical services in Manchester.

Like the state population as a whole, Manchester's demographics are aging. In terms of elder housing, we are fortunate to have The Fields and The Meadows as small, lower cost apartments within Manchester Village. On the other end of the economic scale, the Equinox Terrace assisted living facility, and the newer Equinox Village independent living facility next door are also located within Manchester Village. While each of these two facilities provide a high level of service or care, they are not affordable to many residents. One key to providing more of these types of residential facilities would be through zoning changes to allow higher residential densities in the town core, and to allow nursing home use in more areas of the town. This may be realized with the adoption of new zoning in 2017, and the town will continue to seek ways to facilitate more of these facilities.

Manchester Health Services, Inc., is a non-profit organization that provides a variety of health programs and services, including child health conferences; diabetes, glaucoma and blood pressure clinics; school health programs; home nursing service; physical therapy service; social work services; and medical equipment loans. The Main Street facility, constructed with private donations in 1996, enhanced the staff's ability to provide high-quality services. The organization also runs a thrift shop to generate revenue for operational support. Local schools offer a limited range of in house nursing services to students. A number of private providers offer mental health counseling and psychiatric care, as does United Counseling Services, the Bennington County mental health agency.

Postal Service

Support opportunities for locating a small postal office with retail counter service in the downtown.

The Manchester Center Post Office is in the former "Stovilator" building at the corner of Richville Road and East Manchester Road. Although large enough to better serve the community's needs than the former post office, locating this facility away from the commercial core encouraged new development, and brought significant amounts of new traffic to what was a predominantly-residential area. However, its current location is not incompatible with adjacent uses for a bank, self-storage facility, health clinics, professional offices, and light industry, as well as residential. With its own zip code, Manchester Village is also served by its own post office

on Seminary Avenue. In the long run, the town would be better served by having a post office in a more traditional downtown location. Given the trend in the last decade for federal contraction of postal services, this goal may not be attainable in the short run.

Section 3.5: Education

Education Mission: Provide for the highest quality education for the children of Manchester, encourage youth to pursue higher education and training that will prepare them to be successful as adults, and promote lifelong learning opportunities for all residents.

Manchester is home to a number of educational institutions, including:

Burr and Burton Academy (BBA), grades 9-12 Downtown School, grades pre K-3 in 2016-17, growing by a grade each year Manchester Elementary-Middle School (MEMS), grades pre-K-8 Maple Street School, grades K-8 Home Away From Home Preschool and Childcare Center, pre-K and after school Northshire Day School, pre-K and after school Stepping Stones Early Learning Center, pre-K and after school Take Five Childcare, pre-K and after school

The Manchester School District belongs to the Bennington-Rutland Supervisory Union. Manchester Elementary-Middle School, or MEMS, offers elementary and middle school instruction in grades Pre-K-8. As Manchester has no designated high school, students may attend the secondary school of their choice. Most students in grades 9-12 attend Burr and Burton Academy, or BBA, an independent school that serves as the de facto local high school. Voters have traditionally approved paying full tuition for students attending Burr and Burton Academy; and, by law, the full amount to other public high schools, and the state average tuition for secondary students wishing to attend other private or non-sectarian high schools.

Other educational institutions serving Manchester residents include Long Trail School and Lawrence School for Young Children in Dorset, Maple Street School and The Downtown School in Manchester, West River Montessori School in Londonderry, the Mountain School at Winhall, Stratton Mountain School in Stratton, Hiland Hall School in Bennington, and the Southshire Community School in North Bennington. Some parents also choose to provide home schooling for their children. However, most children at the elementary and middle school levels attend the town's public school, MEMS. During the 2016-2017 school year, Manchester Elementary-Middle School is serving 388 students (an increase of 4 students compared with 2015-2016), and the District's Average Daily Membership is 604.41 students (a decrease of 21.39 students compared with 2015-2016).

The Manchester community values education highly and has high expectations for school programs and student achievement. This is evidenced by annual support of school budgets and by a high level of parent involvement in the schools. The goals of the Manchester School District are to establish high-quality teaching and learning, to develop consistency and continuity among the grades, and to increase capacity to achieve higher standards and increase student achievement. To accomplish these goals, the Manchester Elementary-Middle School will continue to work on its Continuous Improvement Plan. This plan implements an ongoing cycle of review and revision of instructional practices driven by student performance data. The plan focuses on improvement of foundational skills in reading in the primary grades and

Manchester, Vermont | Town Plan 2017

improvement of students' ability to comprehend and work with informational text. Additionally, MEMS has redesigned and improved its student behavior management system to reduce disruptive behavior in the classroom and to increase student time on task, both aspects of increased opportunities for improved academic success.

The challenge, as always, is how to provide a high-quality educational experience that remains affordable to the taxpayers. It is clear that creativity and caution are needed in this arena. As a result of Act 46, Manchester School District engaged in discussions with Dorset, Danby, Mt. Tabor, Mountain Towns R.E.D. and Sunderland about forming a new Regional Education District. These discussions have resulted in a merger plan passed by the voters of each of these towns during the March, 2017, election.

Although Manchester gives the appearance of an economically-thriving community, a closer look reveals a wide range of income levels. While there are upper income households, a significant number of families fall within the lower middle income range and below. Within our diverse population, over 19.4% of Manchester children are Medicaid-eligible, and about 46.4% of our students participate in the free and reduced-cost lunch program at MEMS. Manchester School District continues to reexamine its entire educational system, investigating how both mandated and desired services can be provided in the most efficient and effective ways. The special education program, use of paraeducators, and class sizes have all been altered to meet current demands.

Educational issues and concerns are not limited to the Pre-K- grade 12 years. For example, access to affordable, high-quality day care for young children is a continuing concern for both single- and two-parent families. Currently, daycare is provided in home settings as well as organized institutions such as Northshire Day School, Home Away From Home, Stepping Stones, and Take Five child care centers. Given the need for child care in today's society, the town should ensure that its policies and ordinances encourage, rather than impede, provision of these services. Consistent with this and with state statute, the *Manchester Land Use & Development Ordinance* provides for child care facilities in most zoning districts. It is important that these facilities are integrated appropriately into residential neighborhoods, especially with regard to traffic, parking, noise, and other potential impacts.

Other local nonprofits have long provided learning opportunities. The Manchester Community Library is a rich and varied resource for both students and community members. It offers opportunities for preschoolers through college students as well as children through seniors. The Manchester Historical Society hosts lectures and walking tours of historic neighborhoods. The Southern Vermont Arts Center has classes in a variety of media. Hildene: The Lincoln Family Home offers a multifaceted approach involving history, land use, conservation, summer camps, astronomy, and niche farming. Other programs are provided by the Green Mountain Academy for Lifelong Learning, Manchester Music Festival, and Equinox Preservation Trust. Our local schools also add to the town's cultural offerings, with the rich mix of artistic, musical, literary, and athletic events each year. There remains interest in further opportunities for higher education for both workforce training and personal enlightenment. Educational programs for all ages and levels should provide challenging, effective, and affordable opportunities for creative learning and personal and professional growth.

Section 4: Recreation, Arts & Culture

Section 4.1: Recreation

Recreation Mission: Develop, support and maintain world class recreational opportunities for residents and visitors alike.

Due to its location in the heart of Southern Vermont's ski country, incorporation of the Green Mountains and Taconic Range within its borders, and the recreational significance of the Batten Kill, Manchester is a very sports-oriented community. Recreation, especially outdoor activity, is integral to community life in Manchester. Hiking, biking, running, skiing, swimming, tennis, golf, boating, horseback riding, hunting, fishing, and other activities are all commonly pursued by residents and visitors to the town. School-based and community-based soccer, football, basketball, lacrosse, field hockey, baseball, volleyball, softball, swimming and ice hockey programs garner strong participation from all age groups in the town. In addition, local schoolchildren are able to learn to ski through JISP (Junior Instructional Ski Program), a unique, cooperative program between the local schools and ski areas.

Thus, the town's recreation area (officially known as the Dana L. Thompson Memorial Park, but more commonly just called the Rec Park) is heavily used year-round for both scholastic and community organized sporting events, annual events such as the July 4 celebration, and family gatherings. The Manchester Parks & Recreation Department maintains a full schedule of sporting events, summer camps, and pool activities at the Rec Park. The Park House was built in 2012 and offers office space for department staff, functions as a pool house in the summer, and is a venue for hosting yoga and other activities year-round. The Rec Park includes several athletic fields, including Applejack Stadium, a championship quality regulation (up to 120 yards by 75 yards) soccer, football and lacrosse field complete with lighting, announcing booth, historic grandstand and food concessions. Eckhardt Field and McClellan Field, located just north of Applejack Field, are 125 yards by 75 yards and include benches and electronic scoreboards. The town is supporting plans by a local skateboarding group for a new and expanded skateboard facility at the park. An Eagle Scout project approved by the selectboard in 2016 involves adding exercise stations along the one-mile walking path at the park.

In line with actions identified in the *Northshire Economic Development Strategy* (NEDS) in 2016, and after embarking on a \$400,000 capital campaign, the town completed the construction of the new Eckhardt and McClellan playing fields and is continuing to improve existing playing fields at the park. These new and improved fields along with those at local schools, including a new turf field at Burr and Burton Academy, position Manchester to host sports tournaments. The town is actively working to develop a strategy to market Manchester as a tournament venue for soccer in particular. With the development of the 98-room Hampton Inn underway, and the recent completion of the 87-room Taconic Inn in Manchester Village, as well as the number of long established hotels and motels in town, Manchester is well positioned to function as a sports venue.

Concerts on the Green programming has become a popular summer activity at the Town Green in the heart of the downtown. In order to maintain and enhance the quantity and quality of its offerings, the Parks & Recreation Department will continue to depend upon the wide range of volunteer efforts which have proven so successful in the past. While the town has been supportive of department's expanded programming, it is clear that part of this support is due to the ability to earn revenue from program fees to help offset expenses.

In addition to municipal recreation services, a short bend of the Appalachian and Long Trail passes into Manchester along Bourn Brook above Rootville Road, and Manchester is a popular resupply stop for thru-hikers. The Long Trail runs along the crest of the Green Mountains from Massachusetts to Canada. This trail, which partially coincides with the Maine-to-Georgia Appalachian Trail, is the oldest long-distance trail in the country. The Long Trail is maintained with cooperative arrangements between the National Forest Service and the Green Mountain Club. The town is actively participating with area outdoor recreation partners -- including Manchester businesses, the Green Mountain National Forest, and the Green Mountain Club -- to establish Manchester as an Appalachian Trail Community, a program of the Appalachian Trail Conservancy. This would identify Manchester as an asset to thru-hikers and others seeking services in town such as a laundromat, overnight accommodations, post office, farmers market and grocery stores, or retail outfitters. The program would also engage and assist the Manchester community with sustainable economic development through tourism and outdoor recreation while preserving and protecting the Appalachian Trail.

Trails along the side of Equinox Mountain and other areas of town have historically been, and continue to be, used for hiking, cross-country skiing, horseback riding, hunting, and snowmobiling. Continued public access to these trails is essential, and must be maintained. Equinox Pond and its adjoining trail network, are now conserved, protected, and maintained through the efforts of Equinox Resort Associates and the Equinox Preservation Trust. While public access is now secure for these particular lands, similar arrangements should be pursued for adjoining lands so that a greenway network can be maintained and enhanced for the enjoyment of all.

As discussed in the transportation section of this plan, creating a greenway network of bike, ski, and pedestrian paths throughout the town remains a priority. Development proposals which include any portion of this network should allow for and incorporate these paths in site planning. This is especially important on land with existing paths or trails, along identified or potential trail corridors, and on land with river frontage. Creating parks or walkways along the West Branch of the Batten Kill in the central business district should be a priority for the town, local businesses, and community service organizations. The recent work of Manchester Riverwalk is addressing this priority and the town will continue to support the work of the organization to realize this goal.

Outside of the downtown, public access to riverbanks and trails should be preserved and enhanced. Toward that end, partnerships should be formed with private landowners, land trusts, the Green Mountain National Forest, and other natural allies. Lands adjacent to streams should be accessible to the public and may not be isolated or land-locked by properties in private ownership. This objective may be accomplished through land acquisition, stream bank easements, permit conditions, or other appropriate techniques. As in other situations, partnerships that accomplish mutual goals may be the most effective approaches.

Goals and Policies Regarding Recreation Services:

 Improve coordination and communication with other groups providing recreation services, including local schools, to minimize programming conflicts or duplication, and to maximize efficient and effective use of facilities, as well as service delivery.

- Provide outcome-driven programming with an emphasis on community health and wellness. Specifically target cross-generational activities for families, teens, and seniors.
- Ensure that user fees for programs and facilities are reasonable and establish a scholarship fund for low-income citizens.
- Encourage other towns in the area to participate in activities, uses, and financial support for both capital and operational funding, as the Rec Park certainly serves as a regional facility. As an example, Burr & Burton Academy uses the park regularly. While this is Manchester's secondary school, roughly 60% of the students come from other communities.
- Seek to include parks, trails and open space in the thinking for all future development within the community.

Section 4.2: Arts & Culture

Arts & Culture Mission: Sustain and build on Manchester's strong arts and cultural assets for the enrichment of residents and to attract visitors to the town.

In February 2016 the *Northshire Economic Development Strategy* (NEDS) was completed. This was a collaborative effort among the Town of Manchester, Manchester Village, and the Town of Dorset designed to improve the overall economic conditions in the three municipalities. In the NEDS Action Plan, Goal 2 is entitled "Cultivate the Northshire's Tourism, Food, and Arts and Culture Industries." Within that goal, Action 2D is "Foster arts and culture in the region through collaboration and joint-marketing." The section has two action items: (1) develop an arts and culture committee, and (2) create an inventory of existing arts and cultural assets and assessment of needs. A basic inventory of Manchester arts assets is included in Appendix B. As a follow up to NEDS, Manchester and Dorset will conduct a needs assessment for arts and cultural institutions and activities in the Northshire.

Manchester, as the hub of the Northshire, recognizes the value of the arts, crafts, culture and entertainment assets to the quality of life and economic vitality of the town and the Northshire community at large. Fostering these assets brings important benefits to the town for visitors and residents alike. In this context, it is appropriate to consider the for-profit and non-profit activities as seamless. While bringing independent and separate skills and interests to the community, together artisans and arts organizations make a major contribution to the character of Manchester and represent a strong aspect of what makes the town special.

The activities and diverse offerings in arts, crafts, culture and entertainment include art exhibitions at Southern Vermont Arts Center (SVAC) and in many commercial galleries, music performances of all genres from professional classical performances to band concerts on the Town Green, and live theater and performances by students at Burr and Burton Academy. The strong talents of area craftspeople range from high quality furniture and cabinet-making, to glassblowing, stained glass, ceramics, fabrics, and many individual artists and artisans creating work for exhibition and sale in shops and at farmers markets.

Manchester, Vermont | Town Plan 2017

Complementing the facilities in schools, rich cultural educational and learning opportunities are available through such venues as the Manchester Community Library, Hildene the Lincoln Family Home, and individuals with qualified skills in voice and a variety of instruments with classes offered for adults and children. These assets are amplified by local libraries, museums and historical societies. Live entertainment is available in many venues, from the Arkell Pavilion at SVAC, Streetfest in Manchester Center in June and July, live music in restaurants and hotels, to special summer events. Other entertainment events such as the Manchester Fall Art and Craft Festival, the Annual Manchester Antique and Classic Car Show and the Vermont Summer Festival Horse Show attract many visitors to Manchester and the area and provide enjoyment to all. Overall, the economic and cultural impact of these activities is significant. At little, if any, cost to the town budget, they are well worthy of town support and in that regard it would be beneficial to establish an Arts and Culture Committee as a recognized bridge with town government.

The goal is to promote public appreciation, participation and support for the valuable contribution that the arts, crafts, cultural and entertainment activities make to Manchester's economic health and quality of life. Supporting strong and viable arts and creative industries sector is key to this. Understanding the valuable role of the arts, crafts, culture and entertainment sector in attracting visitors and providing jobs in the area is also key.

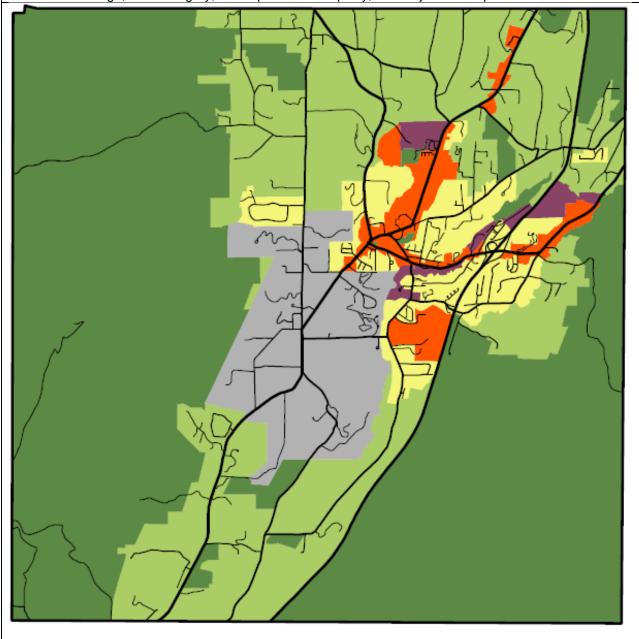
Policies & Actions

- Support the establishment of an Arts and Culture Committee as an important bridge between for-profit and non-profit arts and cultural activities and town government.
- Collect information on arts, crafts, culture and entertainment activities and events and assist in making the information available online and in print.
- Working with the Arts and Culture Committee, measure the economic impact of arts and creative industries in Manchester.
- With the town of Dorset, apply for a Municipal Planning Grant to conduct a needs assessment for arts and cultural institutions and activities in the Northshire.

Part 2: Land Use Plan

Land Use Mission: Protect the traditional New England land use pattern of a densely developed downtown surrounded by rural working lands and forested ridgelines.

Map 5.1. Land Use Map. Land use categories include (1) Forest, Conservation and Recreation Lands in green, (2) Rural Residential and Agricultural Lands in light green, (3) Neighborhood Residential Lands in yellow, (4) Mixed Use and Commercial Lands in orange, and (5) Office and Industrial Lands in purple. Manchester Village, shown in grey, is a separate municipality, not subject to this plan.



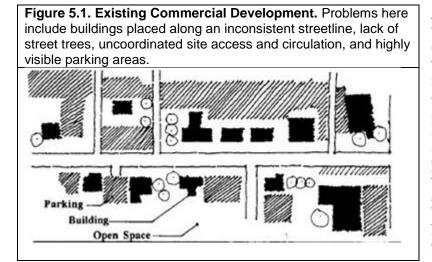
Large portions of the Town of Manchester remain largely undeveloped and forested. Another major portion of the town's land area is comprised of open land, agricultural, and rural residential use. About a sixth of the land area includes the commercial core, surrounding mixed commercial, industrial and residential areas, as well as neighborhood residential areas. Manchester Village, having its own municipal plan and zoning ordinance and therefore not subject to this plan, also comprises about a sixth of the land area of the town. The official land use map (Map 5.1) depicts these general land uses throughout town. These land use areas are discussed in turn in the following sections.

Section 5: Mixed Use Core & Historic Districts

Section 5.1: The Core

Mission for the Core: Promote development of a dense mixed use walkable core with compelling year-round daytime and nighttime activities.

The downtown core, defined in the *Manchester Land Use & Development Ordinance* as "the portion of the Town of Manchester falling in the commercial and historic zoning districts and within 2,500 feet of the roundabout at the intersection of Main Street and Depot Street," should continue to be the area where the most intensive development is allowed. Efforts should continue to promote the core as a true mixed use district, including residential, with emphasis on social vitality and pedestrian-friendly connectivity throughout. Although land uses other than retail are certainly desired and encouraged, concern remains about the nature and extent of retail development in the downtown. While the visitor-based economy remains key for Manchester, we who live and work here also have essential needs that must be met. As was identified in the *Northshire Economic Development Strategy*, there is room for growth in retail geared toward serving the resident population. While difficult to regulate entirely, the town should take proactive steps to ensure that an appropriate mix of goods, services, and amenities exist for residents of the town and region. At the same time, there is demand for housing in the core and the town is actively engaged in revising the land use and development ordinance (*i.e.*, zoning regulations) to allow denser residential development in the core.

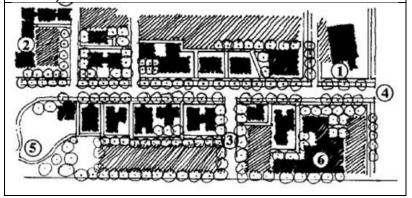


Aside from the mix of uses in the downtown, another aspect of the core requiring attention is the pattern of development. The zoning regulations are being crafted to encourage architecture that references Manchester's historic buildings and is scaled and caters to the pedestrian rather than the vehicle. As such parking lots should be located behind buildings, buildings should be located at consistent setbacks from the street, greenspaces should be installed, curb cuts

should be consolidated, and internal connections between adjacent developments should be encouraged, and an extensive network of walkways should be provided.

Redevelopment of commercial properties and road corridors within the downtown should result in a more pedestrian friendly environment which encourages people to get out of their cars and walk. This may include, but is not limited to: relocating sidewalks away from the road, adding bike lanes, improving greenspace and street tree planting, reducing the number and width of curbcuts, adding benches and other pedestrian amenities, and continuing to enhance both public sidewalks and off street links for pedestrians and cyclists. The town is actively pursuing a redesign of Depot Street to realize many of these elements. Redevelopment goals also include creating off-street links between adjoining commercial uses, installation of landscaping and other screening, particularly to hide parking lots, preserving and adding new on-street parking where practical, and other strategies that take a holistic approach to transportation and land use design. The goal is to improve the overall function for all transportation modes in a complete transportation network, on both public and private property in the core.

Figure 5.2. Desired Commercial Development. Improved conditions include buildings placed along a consistent streetline, parking lots linked and hidden in rear yards, consistent street tree planting and greenspace areas, and enhanced pedestrian walkways.



At the same time, enhancement of the downtown streetscape through careful attention to architectural, landscaping, and siting standards should be accomplished. This will include providing improved access to the Batten Kill in the downtown through supporting the efforts of Manchester Riverwalk. It will also include protection of existing significant trees and other natural or topographic features throughout the downtown.

Respect residents' needs, and facilitate development which caters to the resident community, while respecting and acknowledging the economic values of visitor-based businesses. This challenges us to create an environment that supports and encourages a variety of economic uses, serving residents and visitors alike - a true mixed-use environment, with different types of retail activity, residential uses, professional offices, restaurants, service businesses, theaters, and other activities and amenities that contribute to a successful, vibrant community. A key part of this is creating and maintaining a business environment that is hospitable to locally-owned and managed businesses, and to businesses which provide the necessities and niceties of everyday living to residents. It also includes working to preserve existing and to provide new housing opportunities in the downtown area.

Ensure our zoning bylaws allow effective and efficient use of land, and offer incentives to provide for or achieve stated needs such as downtown housing that is affordable; affordable and attractive commercial space for locally oriented businesses; professional offices and services, and other types of land uses that will contribute to a stronger, more diverse economic base. Preserve and enhance the historic integrity, and the scale and character, of the historic downtown and its buildings of local, state, or national historic significance. Enhance the historical look and feel of a rural, village-type environment while accommodating 21st century needs and circumstances.

Section 5.2: Historic Districts

Historic Districts Mission: Protect the integrity of Manchester's four historic districts as living links to the town's past by requiring preservation of historic structures and new development to be compatible with the traditional historic neighborhood character within each district.

Manchester's residents value the protection of historically significant sites, buildings, and areas. A detailed historic site survey of the town was conducted in 1986 by the Vermont Division of Historic Preservation. This survey revealed a rich mixture of historic styles, and identified four historically significant districts: Manchester Center Historic, Bonnet Street Historic, Manchester Depot Historic, and North Manchester Center Historic districts. These four districts reflect the historic qualities of the town center, and are located at key entry points to the center. The 1986 survey was updated in 2008 with color photographs of each contributing structure and narrative information about changes that occurred between 1986 and 2008. In 2015, the town adopted a new name for the North Manchester Center Historic District to better distinguish it from other zoning districts, namely the Manchester Center Historic and Historic Main Street districts. The North Manchester Center Historic District is now called the North Main Street Historic District. The Historic Main Street District was renamed Manchester Center Historic District for similar reasons.

In 2016 town planning staff and members of the Manchester Historical Society began to develop new orthophoto based historic district maps and survey narratives. Expansion of districts to include a small number of noncontributing structures or contributing structures that had been excluded from the 1986 delineated districts is being contemplated. The aim of this effort will be to revise district boundaries for the four historic districts to offer more integrity to the historic neighborhoods. The effort would involve survey and mapping work for properties to be included in the expanded district, landowner involvement, public meetings and eventual application to the Vermont Division for Historic Preservation for inclusion of expanded areas in the State Register of Historic Places.

Actions:

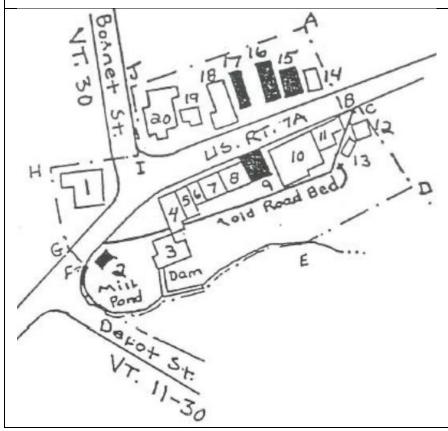
- Develop a plan for signage with QR codes specific to each district. Signage will be designed and installed to offer wayfinding and walking tour information for each historic district.
- Apply to the Vermont Division of Historic Preservation for expansion of historic district boundaries.

Manchester Center Historic (MCH) District

The Manchester Center Historic District is an example of a nineteenth-century crossroads commercial center. Topography was influential in determining the location of the center. The Batten Kill provided water power necessary for establishing various early mills and small industries (hence the early name, Factory Point, still associated with building number 10 shown in Figure 5.3 and Figure 5.4). The intersection of several important roads was a significant factor in making Factory Point the business center of town. Contributing structures include landmark buildings such as the Northshire Bookstore (building number 1), the recently redeveloped

Factory Point Bank building (now called Factory Point Place), Kimball Grist Mill (building 3), and the Baptist Church (building 20) among over one dozen others.

Figure 5.3. Manchester Center Historic District. Original map from the 1986 state historic survey. Contributing structures outlined, noncontributing structures shown with black fill.



The town completed an updated survey of Manchester's historic districts and structures in 2008. The 2008 survey provides photographic documentation of structures and reveals numerous changes within the MCH district. For example, the update shows the Northshire Bookstore (building 1) has been significantly expanded now incorporating a formerly adjacent structure to the north. Building 6 on Main Street has been combined with building 5, and building 13 no longer stands. In addition, an old post and beam barn with marble foundation and slate roof next to building 12 curiously not included in the original survey - is being renovated in

conjunction with building 12. These changes combined with a few modified and repositioned historic structures on the two parcels east of building 14 may warrant establishing a new survey map with extended district boundaries. Extended boundaries may help protect the design integrity of the district by incorporating a few additional adjacent structures. Figure 5.4 is an example of what the new map might look like, minus new expanded boundary lines.

Actions:

- Plan for expansion of the MCH district boundaries to include the bridge under the roundabout, the buildings between the original district boundary and the Bonnet Street Historic Boundary, and historic structures within the Green Mountain Village Shops and adjacent property.
- Replace the original MCH historic district map with new orthophoto based map. See Figure 5.4 as an example of a new map, lacking the district boundary. A new map would have to incorporate the district boundary lines.

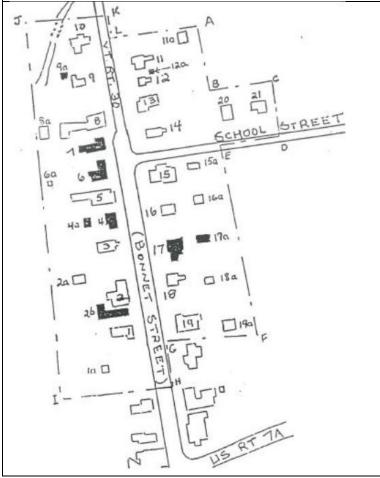


Figure 5.4. Manchester Center Historic (MCH) District. Contributing structures indicated numerically; noncontributing structures indicated alphabetically. Inclusion of noncontributing buildings A, B, C, D, and E would expand the district. Including the former bowling alley building next to building 14 and the adjacent Long Ago and Far Away building (not shown) could also be contemplated.

Bonnet Street Historic (BSH) District

The Bonnet Street Historic District is a linear residential district flanking Bonnet Street (Vermont Route 30) as it heads north out of the commercial center of Manchester. The district includes houses in a wide range of nineteenth- and early twentieth-century residential styles, a reflection of Manchester's slow, steady growth throughout the period. Significant activity in this district occurred in the decades around the turn of the 19th century, when a brick rectory (number 18 in the historic survey) and several Italianate-style and large Colonial Revival style houses were built, and the oldest house in the district (number 8 in the survey) was remodeled in a distinctive "Carpenter Gothic" style. White marble sidewalks, stoops and foundations unify the district visually, and serve as reminders of the importance of the marble industry in this area's economy. In 2015, the west side of this district was rezoned to be part of the Commercial 3 District to allow more commercial uses while protecting the historic residential character.

Figure 5.4. Bonnet Street Historic District. Original district map from the 1986 state historic survey. Contributing structures outlined, noncontributing structures shown with black fill.



Actions:

- Pursue expansion of the BSH district boundary to include the interior historic structure on east side of Bonnet Street behind building 20 and to coincide with the MCH district boundary.
- Replace the original historic district map with new orthophoto based map.

Manchester Depot Historic (MDH) District

The Manchester Depot Historic District is a grid-plan district built up in the decades around the turn of the 19th to 20th century as a residential and commercial neighborhood associated with the railroad and with a booming marble milling and woodworking industry. Included in the district are a variety of little-altered vernacular houses and stores and one outstanding Shingle Style house (number 19). Intrusions are few and consist of two recently

moved buildings (numbers 6 and 30a), a recent garage, and two severely altered houses (numbers 16 and 18).

The early core of the district was formed at the intersection of Elm Street and Highland Avenue. Here a few small stores were built in the 1870s, probably in response to the Western Vermont Railroad Company's institution of a daily through train from New York City to Manchester in 1871. Train service catered to tourists who came to enjoy Manchester's natural beauty and stay in the area's many hotels. As Lewis Aldrick wrote in his 1889 History of Bennington County, Vermont, "The shops at the Depot were built about twenty-one years ago, and at that time there was but one or two buildings in the village."

The heyday of Manchester Depot was the first decade of the twentieth century. In 1890 the Rutland Railroad took over rail service, with plans to build up the line with fast passenger trains from New York City through Western Vermont to Canada, and to construct a new station. From 1903 to 1905, a large hotel was built at the depot. In 1902, Manchester's largest marble works, the Norcross-West Marble Company, began operations near the intersection of Depot Street and Richville Road. Norcross supplied marble to many public buildings, including the New York

Public Library. A single-track railroad, optimistically named the "Manchester, Dorset and Granville Railroad" (and later nicknamed "Mud, Dirt, & Gravel"), was built to haul marble from Dorset.

Figure 5.5. Manchester Depot Historic District. Original district map from the 1986 state historic survey. Noncontributing structures indicated in black, contributing structures outlined.

The first decade of the century also saw the beginning of commercial harvesting in the softwood forests covering the Green Mountains to the east of Manchester. Spruce was processed as pulp

or lumber in the large mills that were built in the Richville section of town. Most of the houses in the Manchester Depot Historic District were built during these same years. Although they vary in plans and architectural details such as gable windows and window lintels, these houses are similar in style, lending a continuity to the district. Today the district sports a lively mix of color and activity and is served by a paved municipal parking lot at the corner of Highland Avenue and Elm Street.

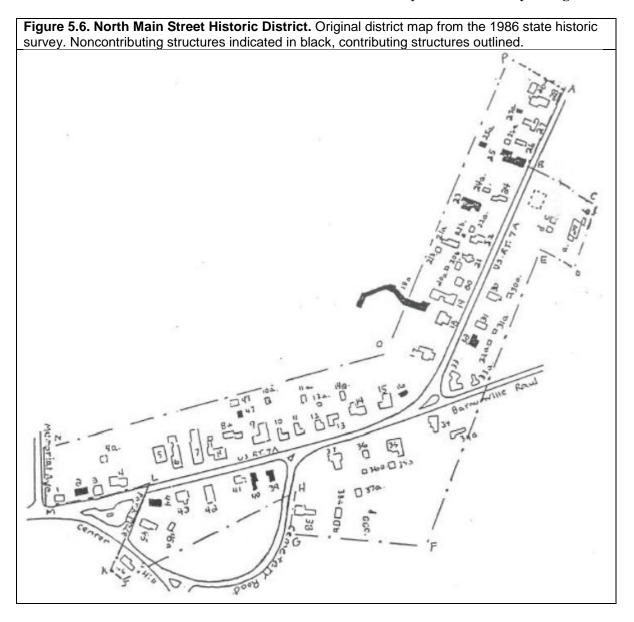
Actions:

Pursue expansion of the MDH boundary to include the town parking lot and adjacent Elm Street properties.

Replace the original historic district map with new orthophoto based map.

North Main Street Historic (NMSH) District

Formerly referred to as the North Manchester Center Historic District, the district was renamed in 2015 to better distinguish it from the Manchester Center Historic district and the Manchester Center Corridor. The district has a linear orientation, flanking Main Street, which was known as Maple Street until the late 1920s. Although the district was historically integrated with the commercial and manufacturing center at Factory Point to the southwest, it is now visually separated from that historic core by the Rite Aid shopping center on the north side of Main Street and a stretch of recent structures on the south side of Main Street, including the Merchants Bank building, the copy center building, and the building housing Cilantros and Image Loft. Adams Park, between Main Street, Park Place, and Center Hill Road, is excluded from the district and should be considered for inclusion in any future boundary changes.



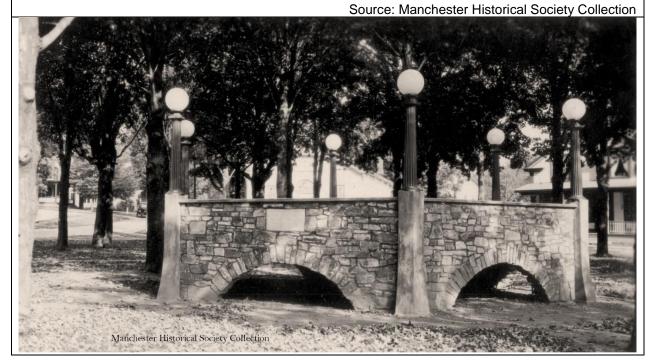
The NMSH district is comprised primarily of residential structures, although many small early shops and a store bear witness to Manchester's nineteenth-century role as a commercial and industrial center serving an extensive agricultural hinterland. These include a tin shop (number 33, c.1790), two mid-nineteenth century blacksmith shops and a harness shop (numbers 9, 48 and 42), a watchmaker's shop (number 45, c. 1985), and a store (number 3, c. 1860). There are also two early taverns, one still serving its original function (number 8) and one converted to a residence (number 37).

Represented in this district are vernacular interpretations of a variety of styles, ranging from the late eighteenth-century through the early twentieth-century. Several of the earliest buildings (number 8, 33, 37, and 38) retain Federal-style doorways, marked by four delicate pilasters and a narrow cornice. The preponderant style is Greek Revival which stretched from the 1830s to well past the Civil War era. Conspicuously excluded from the district is town owned Adams Park, current home of the Manchester Farmers Market, and former home of the Adams Park Bandstand (See Figure 5.7).

Actions:

- Rename the North Main Street Historic District to better reflect the place history of the district.
- Plan for expansion of the district boundary to include Adams Park.
- Replace the original historic district map with new orthophoto based map.

Figure 5.7. Adams Park Bandstand. The Adams Park bandstand was in regular use from its construction at under \$900 in the early 1920s until its demolition in the early 1960s to make way for a visitor center.

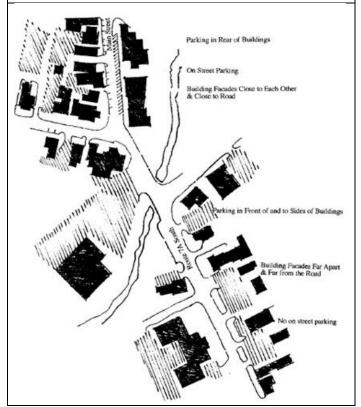


Building and Design Goals for the Core & Historic Districts:

As described more fully in *Design Guidelines for Manchester's Commercial and Historic Districts* (adopted in 2001 and officially referenced herein), the Town of Manchester seeks to maintain and enhance those aspects of the built environment that contribute to our unique character and historic heritage. The following goals and policies are intended to lead to desired outcomes as described in this plan.

- Buildings should be sited sensitively, with respect to site-specific opportunities and constraints, and should be of size and scale appropriate for the site. Size and scale are sensitive issues, and what is appropriate on one site or in one part of town may be different than in other areas. Architecture should reflect and enhance the historic character of Manchester. Without necessarily replicating precise forms or details, new or renovated buildings should, at a minimum, take their cues from existing historic buildings so that they fit harmoniously, and improve and enhance, the rhythm and fabric of the built environment.
- Architectural design should be considered with an eye to the future: will this building be considered worthy of preservation 100 years from now? High quality construction materials and finishes should be used. Energy efficiency is key, and architects should offer creative solutions the dynamic tension between historic character and present and future needs. For example, adding solar panels on a historic building need not be viewed negatively; rather, why not see this as a way to extend the life of a historic building for present and future needs?
- Buildings should be designed to accommodate different types of uses.
 Structural, architectural, and energy efficient design should be readily adaptable or recyclable for future uses, whether for a single use or for traditional mixed uses.
- Buildings and sites should provide a user-friendly environment, by providing appropriate links with public sidewalks and (where appropriate) adjoining uses, pedestrian amenities such as benches and shade trees, bicycle racks, weather-protected entrances, public restrooms, safe and convenient access (to and from, and within a site), and the like. Covered porches and walkways should be considered (and not counted against a landowner for coverage or density) where they add architectural interest, enhance pedestrian-friendly attributes of the community, and where they are not used for commercial purposes.

Figure 5.7. Historic Main Street and Route 7A South. The pedestrian-oriented Historic Main Street presents a desirable pattern as compared with the more automobile-oriented corridor south of the junction. Note: this drawing predates the construction of the roundabouts.



Preservation of the town's historic heritage is essential in providing important, tangible connections to our past, and thus, to who we are as a community. Historic structures described in the Vermont Historic Sites and Structures Survey should be preserved, and all efforts should be made to ensure the continued use and upkeep of these buildings. Exterior renovations and new construction within the town's designated historic districts should be considered in the design review process as to compatibility with and enhancement of the district.

However, just as the *Vermont Survey of Historic Sites and Structures* distinguishes between historic and non-historic sites, this plan acknowledges that different sites may present different distinguishing characteristics. In many cases, it will be entirely appropriate for the town to require a site to be maintained, renovated, or improved inplace and on-site. There may also be cases where changes to a site or structure are appropriate because it allows a number of other town goals

described in this plan to be satisfied. In effect, there are times when a balance must be found that allows for the best possible overall outcome for the town. Indeed, regulating individual elements of site design in a vacuum, without consideration of the effects on other elements of site design, adjoining properties, or the town as a whole, does not always achieve the desired results. This was one of the most important conclusions of a 1993 build-out analysis conducted by the town: while many developments met the requirements of the town plan and bylaws, we were not achieving our stated goals. Buildings met required setbacks, on-site parking was provided, but we were still getting suburban-style development inconsistent with the town's past, as well as its desired future. We didn't see the forest for the trees: we may have had the details right, but we didn't put them together in desirable patterns. We now know that we are more likely to achieve our stated goals if we place greater emphasis on patterns of land use, and make sure that our bylaws allow and require the results we seek.

Further, Manchester recognizes that individual buildings, historic districts, and the core as a whole are not museums. Seeking to preserve history, without also considering present and future needs, may ultimately doom older buildings to neglect or lack of economic viability. Keeping buildings 'alive' through adaptive reuse inevitably requires flexibility in architectural design. As always, being sensitive to the past is essential. It is a dynamic balance, and no single, predefined approach or answer will be right for each individual case that comes before us.

Proposals to alter or remove historic sites and structures will be reviewed very carefully. Yet, as noted above, being careful does not mean being inflexible; nor does it mean that any change is suspect. The burdens of persuasion and proof remain upon the developer to demonstrate the need for, and short- and long-term value to the town of such proposals.

Section 6: Neighborhood Residential & Developed Recreation

Mission for Neighborhood and Recreation Areas: Promote the development of walkable neighborhoods and recreation amenities adjacent to the core.

As noted in the economic development section of this plan, the town is pursuing a neighborhood area development designation from the state Downtown Board. This designation would offer incentives to housing developers proposing pedestrian oriented neighborhood developments within a given distance from our designated village center. Along with revised zoning bylaws that will allow higher residential density, this designation could go a long way toward helping Manchester meet the long recognized need for housing that would be affordable to people who work in Manchester but currently cannot live here due to lack of workforce housing options. The town has in the past and will continue to work cooperatively with organizations such as Shires Housing, Bennington Area Habitat for Humanity, Housing Vermont, Vermont Housing Finance Agency, and other entities such as Vermont Housing & Conservation Board and Bennington County Regional Commission, all wishing to promote or construct more affordable housing.

After the Manchester Housing Action Plan was completed in 1989 Planned Affordable Residential Development (PARD) provisions were incorporated in to the town zoning ordinance allowing for greater development densities than would otherwise be permitted, and exempting affordable housing projects from the town's Major Development Project Review. These two elements were included in order to address impediments to creating affordable housing in Manchester, particularly land costs and permitting costs. Although recently restructured, these provisions remain essentially unchanged in Section 7.3 of the new *Manchester Land Use & Development Ordinance*.

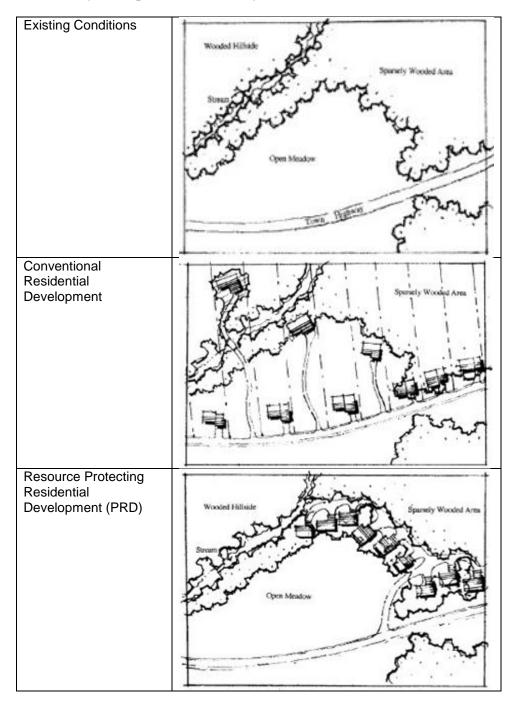
Section 7: Working Lands & Rural Residential

Mission for Working Lands & Rural Areas: Protect open blocks of land for working lands uses and for conservation purposes.

The Farming and Rural Residential (FRR) Zoning District, which covers a large portion of the town's land area, is intended to encourage and preserve agriculture and similar working lands uses, discourage sprawl, preserve open space, and encourage efficient provision of public services. Yet, if that district is subdivided and built out into 2-acre lots as currently allowed, none of those goals can possibly be achieved. Indeed, dividing that land area into 2-acre parcels will destroy the very qualities sought to be protected. Conventional subdivision design discourages agriculture, creates sprawl, chops up open space into private yards, fragments wildlife habitat and recreational trail systems, and makes it difficult or impossible to provide efficient public services. It also does little to foster a sense of community or sense of place.

These concerns were brought into clearer focus in the build out analysis conducted in 2006 for available residential lands in Manchester. Results of that study indicated that approximately 5,000 new housing units could be created at maximum build out, primarily within the FRR district. As with the prior commercial core build out study, what's important is the order of magnitude of possible future development. Further, this informs us of potential impacts of that

future condition: increased cars on the road, more students in our schools, expanded demand on water and other key resources, and greater impacts on the wildlife habitat. With this information in hand, we are better prepared to consider growth that is permitted under current bylaws, and make changes as may be appropriate to manage that growth. The current comprehensive effort to rewrite the zoning ordinance and change zoning district boundaries is informed by these past buildout analyses.



This plan encourages and requires different patterns of development that help to satisfy our stated goals, and help to build a sense of community. These patterns are not new or untested theory. They've been known for years, and their use is now required as part of subdivision

Manchester, Vermont | Town Plan 2017

review. The intent is to protect the natural resources that make the land attractive in the first place, and to build with the land, not against it. Toward that end, it is important to understand the natural environment, and the physical opportunities and constraints presented, on any parcel of land.

Physical conditions (including but not limited to soils, slopes, elevation, critical habitats, wetlands, drainage channels, and flood hazard and riparian areas) may limit the nature or extent of development that is appropriate for a particular site. Protection of forests, wetlands, agricultural land, wildlife habitat, and other important natural resources should also influence subdivision design. Indeed, general land use plans as well as specific development site plans should consider natural resource opportunities and constraints first, and then design appropriate plans with these in mind.

As illustrated on the following pages, plans for subdivisions or residential developments should consider natural resource opportunities and constraints first, and then design appropriate plans with these opportunities and constraints in mind. The intent is to conserve or protect natural resources, while allowing reasonable land development that is sensitive to the landscape, ecologically appropriate, and which allows efficient provision of services. Consequently, subdivisions within the Town of Manchester, particularly in the more rural areas outside the core should: (1) identify all potential conservation or open space areas first; (2) locate appropriate house sites; (3) design road alignments and trails, respecting and protecting existing trail alignments and corridors; and (4) draw in lot lines.

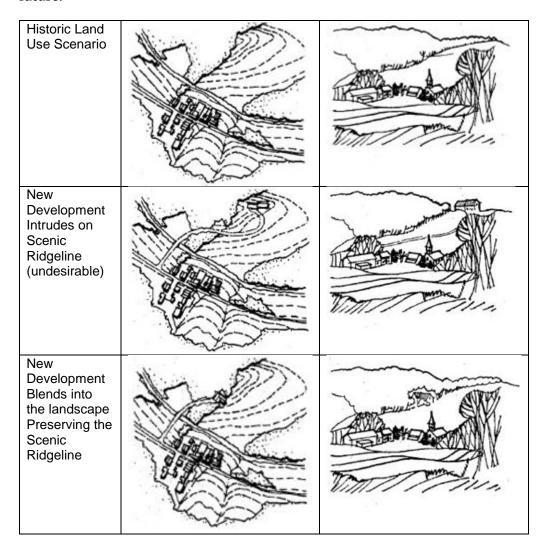
Plans for subdivisions or residential developments should demonstrate satisfaction of the goals expressed in this plan and in the *Manchester Land Use & Development Ordinance*. At a minimum, proposed subdivision designs should demonstrate preservation of agricultural resources, preservation of open space, and efficient provision of public services. As specified in the ordinance, a Planned Residential Development (PRD) with clustered house sites will often satisfy these goals better than a traditional subdivision design utilizing larger building lots.

Natural features such as forests, meadows, rivers, streams, and ridgelines should be conserved, and development should generally be clustered in more appropriate areas. Roads should follow natural contours, and not carve straight lines across the landscape. Buildings should be sited below ridgelines; ideally, below the crest line, so they do not intrude upon the skyline. Shared driveways are encouraged, as they minimize the number of curbcuts along public roads, and are economically and ecologically more efficient. As shown on the accompanying drawings, designing with the land can often result in similar or identical development densities as can more conventional designs that do not respond to natural constraints. Design that respects the land can also create a more pleasant human environment.

Structures built on highly visible slopes should be screened or softened so that they present minimal intrusion into the natural slopes and landscape. This does not mean that all new development must be invisible; rather, that new development should be sited sensitively and carefully, consistent with the values described here. This may require unique ways of siting buildings, maintaining a certain percentage of tree stems or tree canopy, or other creative techniques that place buildings on the land in ways that allow new structures to fit harmoniously into the landscape.

Wherever possible, project designs should maximize the protection of contiguous blocks of land, whether on- or off-site. This will best protect critical resources. Accordingly, development density should be determined on a project basis -- that is, an overall project must meet the

minimum density requirements, but individual parcels within a subdivision need not all be of a certain minimum size. Appropriate protection should be created for long-term protection of conserved or reserved land, so that further subdivision of this land does not take place in the future.



Section 8: Forest, Conservation & Recreation

Forest Conservation and Recreation Mission: Protect forested mountain lands for sustainable timber production, wildlife habitat and passive recreation purposes.

The Forest and Recreation (FR) zoning district - defined by elevation, land cover and GMNF and EPT ownership - comprises about 50% of land area of town. Minimum parcel size of 10 acres was implemented in 2016 and provisions were added to ensure protection of wooded cover by permitted and conditional uses. Off woodlot processing of timber is not allowed. The planning commission is contemplating further increasing the minimum lot size to 25 acres and renaming the district Forest and Conservation, or FC, to stress the importance of maintaining natural conditions throughout this valuable and often vulnerable section of town.

Part 3: Plan Development, Implementation & Context

This 2017 Town Plan was developed by the planning commission with the assistance of town staff, the conservation commission, an *ad hoc* arts and culture committee, and members of the Manchester Historical Society. It is essentially a reorganization and update to the 2012 plan, with added required new sections on flood resilience and renewable energy resources. The planning and conservation commissions held numerous public meetings throughout 2016 to work on sections of the plan and seek public input. The planning commission then prepared a final draft in February 2017 to propose to the public and forward to the selectboard for adoption in May. After the 2020 Census, the commission will draft a new plan incorporating new census data and will continue to refine the format of the plan to more clearly incorporate action items associated with particular adopted policies and goals.

Context

To date, there have been few, if any, conflicts over planning and development issues with adjoining towns. However, the potential certainly exists. Generally, towns have sovereign rights over planning issues within their borders. However, issues related to planning, natural resources, and impacts of development are not limited to neat lines or political boundaries. Thus, it is appropriate to consider these issues, anticipate possible problems, and work proactively toward solutions.

This is especially true for the town and Manchester Village. Although surrounded by the town, the village maintains its own separate planning process and regulatory scheme. Nonetheless, much of the appeal for the village rests in the viewscapes of the Taconic and Green Mountain ranges it enjoys and which are incorporated within the town borders. The town and village should cooperate on planning issues whenever possible for mutual benefit and maximum effectiveness. In fact, the town allows village residents, as de facto residents of the town, to actively participate on its planning and conservation commissions.

While much of the land on Manchester's eastern boundary is essentially protected from development as part of the Green Mountain National Forest, some adjoining land in Winhall is consists of small lot residential development. A number of these houses can be seen easily from the valley throughout Manchester. Manchester should seeks ways to minimize the potential impact of increased development along this boundary by increased communication between the Manchester and Winhall planning commissions.

The potential exists for similar conflict on Manchester's southerly boundary, along RT 7A. While limited development is allowed in Manchester, this area is adjacent to a commercial area in Sunderland. These same concerns apply at the town's northerly boundary, where RT 7A makes the transition from the Bullhead Pond, Manchester Country Club and rural residential parcels into Dorset's Commercial-Industrial zone. In both cases, Manchester should work with adjoining towns to consider ways to lessen the contrast of abrupt transitions in existing or potential land uses.

In addition to the town's coordinated effort with Manchester Village and the Town of Dorset on the *Northshire Economic Development Strategy*, inter-municipal cooperation is also needed for regional issues such as solid waste management, transportation planning, and telecommunications towers. These issues transcend not only town boundaries, but also individual towns' ability to provide or address. Appropriate solutions therefore require a more regional perspective. The Bennington County Regional Commission (BCRC) has helped to

Manchester, Vermont | Town Plan 2017

coordinate planning efforts in the solid waste management, transportation and economic development arenas, the town will continue to encourage BCRC to take an active role in these and other regional issues.

Implementation

This plan describes the goals the Manchester community wishes to achieve, and the policies by which the town will manage its affairs, and establishes specific actions to be undertaken to achieve its goals. As with most significant endeavors, implementation will happen through a multi-faceted approach. It can occur through the adoption and application of companion documents and tools. These include, but are not limited to, the *Manchester Land Use & Development Ordinance*, Capital Improvement Program, *Manchester Hazard Mitigation Plan*, *Northshire Economic Development Strategy*, the Downtown Master Plan to be developed in September 2017, and the Renewable Energy Resource Plan to be developed in 2018. It is important that any changes proposed to these associated documents be consistent with this plan, and help to achieve the goals stated herein.

Implementation also occurs through the process of Act 250 review, where larger development projects are reviewed for conformance with this plan (and, by explicit intent and direct reference throughout, applicable sections of other town documents and programs adopted under specific statutory authority, such as town ordinances and the Capital Improvement Program). This is a comprehensive plan which should be considered as a whole when questions of interpretation arise. Once the town has adopted the renewable Energy resource Plan and it has been confirmed by the Vermont Department of Public Service, implementation will also occur through the Vermont Public Service Board review process concerning the siting of renewable energy resource facilities within Manchester.

Incentives and partnerships can also be appropriate ways to accomplish goals. As in many human endeavors, progress is often best achieved through a balanced approach, combining incentive and encouragement with regulation and restriction; these may also include non-regulatory approaches such as land conservation measures pursued by the Manchester Conservation Commission. Implementation can also occur through direct action taken by citizens and leaders in the community. The Town Green project is a superb example, where an auto dealership was undeveloped into a community greenspace in the heart of town. In the end, this town plan is only as strong as the respect it is accorded, and the value it adds to the community as a foundation policy document and blueprint for action. As Alan Kay (one of the pioneers of personal computing) once said:

The best way to predict the future is to invent it.

In that same light, the plan is the foundation by which the citizens of Manchester may invent their own future. Let us use it well.

Part 4: History and Population Characteristics

Chartered in 1761 by colonial Governor Benning Wentworth of New Hampshire (after the British defeat of the French and native Abenakis in 1760), together with dozens of other Vermont towns, Manchester was first settled in 1764. Over the course of the next several decades, settlements in Manchester included Factory Point, Manchester Village, Manchester Depot, Richville, Barnumville and Beartown among others. High on the flanks of Mount Equinox, Beartown has been long abandoned and the settlements at Richville and Barnumville long since diminished. Manchester Village developed as a resort and second home residential destination. In 1900 Manchester Village incorporated and became a separate municipality. Although some municipal services are shared, the village has its own municipal plan and zoning ordinance and is governed by an elected Board of Trustees.



Figure 9.1. The Junction. Images of the junction at from the late 19th and early 20th centuries (top left: from the bridge; top right: from Bonnet Street; bottom: from North Main Street). Many of the buildings still stand, including the Colburn House now home for the Northshire Bookstore, Kimball Grist Mill, the Baptist Church, and the Factory Point building, currently being redeveloped for condominium, retail and restaurant uses.

Source: Manchester Historical Society Collection

Manchester Center includes the remaining extant historic settlements. At the riparian junction of Main Street with Bonnet Street and Depot Street, Factory Point (See Figure 9.1) was the early business center of the town with mills powered by the West Branch of the Batten Kill. With the advent of railroad in the mid-1800s, Manchester Depot became a mixed commercial and residential center catering to the marble and lumber industries in particular. As these industries diminished in importance, the residential settlements of Richville and Barnumville likewise contracted and Manchester's image as a vacation destination grew. In the 1980s Manchester Center began to be known as a shopping destination with the development of national brand outlets. Manchester continues to be a retail shopping destination to this day. In addition, the town is home to a number of high end restaurants catering to visitors and residents alike.



Figure 9.2: The Manchester train station circa 1946. Weekend skiers from New York and New Jersey. The building still stands as part of the r.k. Miles campus on Depot Street.

Source: Manchester Historical Society Collection

Manchester experienced only very moderate growth through the mid-20th Century. The population increased by about a third after 1950 until 2000, when it leveled off. The 2010 census reported 4,391 people in Manchester, with 749 of those residing in Manchester Village. Manchester saw a population decrease between 2010 and 2015, and estimates project the population to continue to fall between 2015 and 2030. In addition, Manchester's population is older than the Vermont and national averages and is projected to remain so. It remains to be seen whether policies

outlined in this plan will lead to bucking of the demographic trends. An age distribution weighted toward the older demographics, rather than workforce age brackets, is problematic for economic development goals, which is why some of those goals aim to attract a younger demographic to town and provide workforce level housing in the core. After the results of the 2020 census are released, the town will evaluate whether demographic trends have been at all reversed by implementation of economic development and housing policies expressed in this plan.

Appendix A. Inventory of Significant Natural Features in Manchester

Mount Equinox

Location: 2.5 miles (4.0 km) west of Manchester Village

Elevation: 3,816 feet (1164 meters)

The highest mountain in the Taconic Range, Mount Equinox provides a breathtaking backdrop to the Manchester valley, and a panoramic view of the region from its summit. The slopes of the mountain form a significant aquifer recharge area, support unique, rare flora and rare species of bats, and are an important element in the Town's natural beauty. "An excellent exposure of the gradational contact" between marbles and phyllites at the base of the Mount Anthony formation occurs between 1800 and 2100 feet in Cook Hollow. One outcrop displays a series of thin and parallel strata eroded into an intricate, contoured pattern. Solution caves exist in the sides of the mountain. Nearly 1000 acres on the east face of the mountain is now preserved in perpetuity. Equinox Resort Associates has deeded the development rights for 850 acres to the Vermont Land Trust, and for 105 acres to The Nature Conservancy. These lands are under conservation management by the Equinox Preservation Trust, including a trail maintenance program, public trail access, and a wide variety of educational and research activities in partnership with Bennington College, Burr & Burton Seminary, the Vermont Land Trust, and the Vermont Institute for Natural Science.

Skinner's Hollow Cave

Location: Southeast side of Mount Equinox

A solution cave in white marble, with an entrance located near the junction of two slide paths at the base of a high ledge. "A funnel-shaped passage slopes steeply down to the first chamber, 20 feet below the entrance level, from which a hole goes farther down. At the bottom is a room about 35 feet in height. Snow remains in the entrance until July, and ice is found throughout the cave." This cave is on private land and requires permission from the landowner to access and enter. It is also a designated bat hibernacula and is closed to human access from mid-September through June 1. State wildlife biologists suggest the importance of seasonal timing considerations for forestland conversion or clearing in the vicinity of the cave; the best time of year for such activity being the hibernating period from October through March.

Downer Glen and Prospect Rock

Location: about 2.5 miles (4.0 km) southeast of the Main Street Depot Street junction.

Elevation: Between 900 and 2100 feet (275-641 meters)

The Prospect Rock outcrop overlooks the valley from the top of a deep cleft in the ridge of the Green Mountain Range. Bourn Brook flows through the glen, cascading into a rock gorge near the bottom.

Dryer Quarry

Location: West of Route 7 about 0.5 miles (0.8 km) north of the Sunderland Town Line Elevation: About 900 feet (275 meters)

A small quarry exhibiting exposed calcite marble breccia, composed of angular fragments of pinkish, blue-gray, and gray marble along with some rare microcline (mineral of the feldspar

group), cemented by red hematitic marble. The breccia apparently extends from the quarry to an outcrop near the southeastern edge of Equinox Road, but this is the only occurrence in the area.

Bullhead Pond and Bog

Location: About 3 miles (4.8 km) northeast of the Main Street-Depot Street junction

Elevation: About 750 feet (229 meters)

Area: About 5 acres (2 hectares)

A small pond with typical pond and shore vegetation. A small bog lies in a bowl-like depression a short distance to the north of the pond; a small quaking mat has formed at the center of the bog. Crowded in this small area are many species of bog flora. The slope above the bog is wooded with a mixture of deciduous trees; red maple and hophornbeam being the most abundant. Large hemlocks, some with trunks up to 2 feet in diameter, grow in a small woodland on the south slopes of the pond. Due to the presence of these unique features, and the varied ecological habitats in and around the bog, this is an important natural site. Aside from its inherent natural values, it has great merit for nature studies and environmental education. The site is owned by the State of Vermont and managed by the Vermont Department of Fish and Game.

Batten Kill Watershed

Manchester lies fully within the Batten Kill Watershed. Anchored by the Batten Kill, a fastflowing cold stream with a densely-vegetated protective edge. The river begins at a spring and marsh in Dorset, flowing southerly as two separate streams until their confluence in Manchester Center. From there, it continues south into Sunderland and then into Arlington, where it turns westward into New York State, eventually emptying into the Hudson River. The West Branch flows right through the heart of Manchester. It has historic value as a power source for the old factories which were located on the mill pond at Factory Point (adjacent to the Town Green), and current value as a significant natural resource. Manchester Riverwalk is working to enhance the enjoyment and appreciation of the river by the creation of public greenways along the river's edge. The greenway would provide greater public access to the river, and would provide alternative pedestrian pathways, away from vehicular traffic flow, through the downtown for residents and tourists alike. The Batten Kill is famous throughout Vermont and the nation for providing a top-quality trout fishing experience. Even in the summer, a high-quality trout habitat is maintained by the presence of many subsurface springs which feed cold, highlyoxygenated water into the river. These springs also help to maintain the river's depth during the summer months.

In 1991, the Vermont Water Resources Board gave the Batten Kill further recognition in granting its first ever "Outstanding Resource Water" designation. In its decision, the Board concluded that the river deserved this designation for its exceptional natural, recreational, cultural, and scenic values. For all of these reasons, the Batten Kill should have the highest protection possible. Major tributaries to the Batten Kill in Manchester include Lye Brook, Bourn Brook, Bromley Brook, Tanner Brook, Munson Brook and Stony Brook.

Other Unique Natural Features

- Lye Brook Falls, 1.8 miles south of the trailhead off of Benson Road, at 125 feet tall, one of the tallest falls in Vermont.
- Table Rock, above Equinox Pond, providing panoramic view of the valley to the southeast.

Manchester, Vermont | Town Plan 2017

- Punch Bowl, a glacial circue located between Barnumville Road and Depot Street.
- Pew Forest, a large forested parcel above Three Maple Drive that was donated to the University of Vermont for educational purposes, and is now owned and protected by The Nature Conservancy.
- Isham Forest, a forested parcel above Equinox Pond which was donated to and is managed in a cooperative effort by the Vermont Land Trust and the New England Forestry Foundation.
- Pickerel Pond, on Finbars Forest Road south of Bullhead Pond and surrounded on its other three sides by the Manchester Country Club golf course.

Appendix B. Inventory of Arts & Cultural Resources in Manchester

(Inventory conducted in 2016)

Galleries and Permanent Exhibits

Southern Vermont Arts Center, Manchester Village, www.svac.org
Helmholz Fine Art, Depot Street, http://helmholzfineart.com
Hildene, The Lincoln Family Home, Manchester Village, www.hildene.org
Epoch - 18 Vermont Artisans, Main Street, www.epochvermont.com
Gremlin Fine Arts Gallery, Main Street, www.tilting.com
Tilting at Windmills Fine Art Gallery, Highland Avenue, www.tilting.com
John Zaccheo Fine Art Gallery, Main Street, www.johnzaccheofineart.com

Performing Arts and Live Entertainment

Manchester Music Festival, Manchester Village, www.mmfvt.org
Taconic Chamber Players, www.taconic music.org
Northshire Performing Arts, Dorset
Junk Music with The Junkman™, www.junkmusic.online
Tuesday Night Summer Concerts on the Manchester Town Green
Music and Theater at the Riley Center for the Arts, Manchester Village
Music at the Hunter Park Riley Rink, www.rileyrink.com
Music at The Perfect Wife & The Other Woman Tavern, www.perfectwife.com
Jazz at Poncé Bistro, www.poncebistro.com

Annual Arts and Entertainment Events

The Manchester Fall Art and Craft Festival Annual Manchester Antique and Classic Car Show Manchester StreetFest – June and July Annual Manchester Tractor Parade SolarFest, Manchester Village, www.solarfest.org Booktopia, www.northshire.com/event

Artisans at Work

Manchester Hot Glass, Elm Street, www.manchesterhotglass.com
Plow & Stone Furniture, Manchester Village, www.imageartisan.com
Ted Schiffman Photography, Manchester Village, www.imageartisan.com
Matthew Lerman, lermanphotography.net
Les Jőrgensen Photography, Manchester Village, www.lesjorgensen.com
Manchester Arts Studio and Gallery, Main Street, www.manchesterartsvt.com
Irene Cole Design, www.irenecole.com
Pat Musick, www.armanchesterartsvt.com
Kate Franklin, www.irenecole.com
Sara Gay Jewelry, www.saragayart.com
Seal Harbor Rugs, Main Street, www.sealharborrug.com
Johannes Michelson, www.woodhat.com (website under construction)
Deb Fanelli Jeweler, www.debfanelli.com